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OBSTETRICAL TRANSACTIONS.

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VOL. XVIII.

TRANSACTIONS

OF THE

OBSTETRICAL SOCIETY

OF

LONDON.

VOL. XVIII.

FOR THE YEAR 1876.

WITH A LIST OF OFFICERS, FELLOWS, ETC.

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BRITISH SUBJECTS.

Elected

1862 CHURCHILL, FLEETWOOD, M.D., Professor of Midwifery, King's and Queen's College of Physicians, Ireland; Ardtrea Rectory, Stewart's Town, late of 15, Stephen's green north, Dublin. [3, Harcourt street, Dublin.]

1862 MCCLINTOCK, ALFRED H., M.D., late Master of the Lying-in Hospital; 21, Merrion square north, Dublin.

1862 DUNCAN, JAMES MATTHEWS, M.D., A.M., F.R.S. Ed., Lecturer on Midwifery and Diseases of Women and Children, Surgeon's Hall; 30, Charlotte square, Edinburgh.

1870 FARRE, ARTHUR, M.D., F.R.S. (HON. PRES.), Physician-Accoucheur to H.R.H. the Princess of Wales; 12, Hertford street, Mayfair.

1871 KEILLER, ALEXANDER, M.D., F.R.S. Ed., Physician to the Royal Maternity Hospital, Lecturer on Midwifery and Diseases of Women and Children at the Surgical Hall, Edinburgh; 21, Queen Street, Edinburgh.

Elected

1871 KIDD, GEORGE H., M.D., F.R.C.S.I., Obstetrical Surgeon to the Coombe Lying-in Hospital, and Examiner in Midwifery at the Queen's University and Royal College of Surgeons of Ireland; 30, Merrion square south, Dublin.

1870 WEST, CHARLES, M.D., F.R.C.P. (PRESIDENT), Corresponding Member of the Academy of Medicine of Paris; 61, Wimpole street, Cavendish square. *Pres.* 1877.

FOREIGN SUBJECTS.

1872 BARKER, FORDYCE, M.D., Professor of Clinical Midwifery and Diseases of Women at the Bellevue Hospital Medical College, and Obstetric Physician to the Bellevue Hospital; Consulting Physician to the New York State Woman's Hospital, &c.; 85, Madison avenue, New York.

1863 BRAUN, CARL, M.D., Professor of Midwifery, Vienna.

1875 COURTY, AMEDÉE, M.D., Clinical Professor at the Faculty of Medicine of Montpellier.

1863 DEPAUL, JEAN ANNE HENRI, M.D., Professor of Clinical Midwifery, Paris.

1863 FAYE, F. C., M.D., Professor of Midwifery in the University of Christiania.

1864 HECKER, C., M.D., Munich.

1866 HUGENBERGER, THEODOR, M.D., à la Maternité et aux Enfants Trouvés Hôpital des Accouchements, Moscow.

1866 LAZAREWITCH, J., M.D., Kharkoff, Russia.

1864 PAJOT, CH., M.D., Professor of Midwifery to the Faculty of Medicine, Paris.

1877 PEASLEE, E. RANDOLPH, A.M., M.D., Professor of Midwifery, New York.

1866 RIZZOLI, FRANCESCO, M.D., Bologna.

1862 SCANZONI, F. W. VON, M.D., Professor of Midwifery, Würzburg.

Elected

1864 SIMS, J. MARION, M.D., late Surgeon to the Women's Hospital, New York.

1872 SPIEGELBERG, OTTO, M.D., Professor of Clinical Midwifery, and Director of the Gynæcological Clinique in Breslau.

1877 STOLTZ, Professor, M.D., Nancy.

1866 THOMAS, ABRAHAM EVERARD SIMON, M.D., Leyden.

1872 THOMAS, T. GAILLARD, M.D., Professor of Obstetrics in the College of Physicians and Surgeons, New York.

1862 VIRCHOW, RUDOLF, M.D., Professor of Pathological Anatomy in the University of Berlin.

CORRESPONDING FELLOWS.

1873 MARTIN, A. E., M.D., Berlin.

1876 BUDIN, P., M.D., Paris.

1876 CHADWICK, JAMES R., M.D., Physician for Diseases of Women, Boston City Hospital; Boston, Massachusetts.

1877 GOODELL, WILLIAM, M.D., Philadelphia, Penns.

1876 LUSK, JAMES R., M.D., Professor of Obstetrics, University of New York; New York.

1876 PREVÔT, OSCAR, M.D., Moscow.

1877 STORER, HORATIO, M.D., Boston, Mass.

ORDINARY FELLOWS.

FEBRUARY, 1877.

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The letters O.F. are prefixed to the names of the "Original Fellows" of the Society.

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1874 ADAM, A. MERCER, M.D., The Churchyard, Boston, Lincolnshire.

1869 ADAMS, THOMAS RUTHERFORD, M.D., Surgeon to the Croydon General Hospital; Stamford House, St. James's road, West Croydon, S.

1859 ALDERSEY, William Hugh, M.B. Lond., F.R.C.S., South Hayling Island, Havant, Hants.

1871 ALDERSON, FREDERICK H., Southerton House, Dartmouth Road, Hammersmith.

1861 ALDRIDGE, JOHN PETTY, M.D., Shirley House, Dorchester.

1873 ALLEN, HENRY MARCUS, L.R.C.P. Ed., 38, Regency square, Brighton.

1876 ALLEN, MORGAN HENRY LAWRENCE, Wellington House, St. John's Wood.

1859 AMSDEN, GEORGE JOHN, M.D., Wynters, Widford, near Ware, Herts.

1875 ANDERSON, JOHN FORD, M.D., C.M., 28, Buckland crescent, Belsize park, N.W.

1866 ANDREWS, HENRY CHARLES, M.D., 1, Oakley square, N.W.

1859 ANDREWS, JAMES, M.D., 149, Camden road, N.W.

1870 APPLETON, ROBERT CARLISLE, Toll Garel, Beverley.

1859 ARCHER, JOHN, F.R.C.S., 9, Carpenter road, Edgbaston, Birmingham.

Elected

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1861 ARMSTRONG, JOHN, M.D., Green street green, Dartford, Kent.

O.F. AVELING, JAMES H., M.D., Physician to the Chelsea Hospital for Women; 1, Upper Wimpole Street, W. *Council*, 1865-66, 1872. *Hon. Sec.* 1873. *Hon. Lib.* 1874-6. *Vice-Pres.* 1877.

1872 AYLING, ARTHUR H. W., 103, Great Portland street, W.

1859 AYLING, WILLIAM HENRY, L.R.C.P. Ed., 103, Great Portland street, W.

1873 BAILEY, JAMES JOHNSON, M.D., L.R.C.P. Ed., Marple, Cheshire.

1875 BAILEY, THOMAS, Godstone, Surrey.

1864 BAKER, G. BENSON, 40, Hoghton street, Southport, Lancashire.

1867 BAKER, JOHN C., M.D., F.R.C.S. Ed.; 6, Gambier terrace, Hope street, Liverpool.

1876 BAKER, JOHN PENNING, 6, York place, Portman square, W.

1859 BAKER, JOHN WRIGHT, Surgeon to the Derbyshire General Infirmary; 102, Friar gate, Derby. *Hon. Local Sec.*

O.F. BANNISTER, JOHN HENRY, 436, Oxford street, W.

1869 BANTOCK, GEORGE GRANVILLE, M.D., Physician to the Samaritan Free Hospital; 44, Cornwall road, Westbourne park, W. *Council*, 1874-6.

1874 BARBER, EDWARD, 105, Devonshire street, Sheffield.

1874 BARBER, OLIVER, 89, Cemetery road, Sheffield.

1874 BARCLAY, JOHN, M.D., 10, Low street, Banff.

O.F. BARNES, ROBERT, M.D., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery at, St. George's Hospital; 31, Grosvenor street, W. *Vice-Pres.* 1859-60. *Council*, 1861-62, 1867-76. *Treas.* 1863-64. *Pres.* 1865-66. *Trustee.*

1875 BARNES, R. S. FANCOURT, M.B., C.M., Physician-Accoucheur to the St. George's and St. James's Dispensary; 39, Weymouth street, Portland place, W.

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1863 BARRATT, JOSEPH G., M.D., 8, Cleveland gardens, Bayswater, W.

1861* BARTRUM, JOHN S., F.R.C.S., Surgeon to the Bath General Hospital; 41, Gay street, Bath. *Hon. Loc. Sec. Council*, 1877.

1866 BASSETT, JOHN, M.D., Professor of Midwifery at the Queen's College, Birmingham; 144, Hockley Hill, Birmingham. *Council*, 1874-6.

1873 BATE, GEORGE P., L.R.C.P. Ed., 412, Bethnal Green road, E.

1859 BATEMAN, HENRY, F.R.C.S., 13, Canonbury lane, Islington, N.

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1871 BEACH, FLETCHER, M.B., Asylum for Idiots, Lower Clapton, N.E.

1871 BEADLES, ARTHUR, Park House, 11, Park road terrace, Forest hill, S.E.

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1868 BEIGEL, HERMANN, M.D., 2, Lichtenstein Strasse, Vienna.

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1873* BENNET, JAMES HENRY, M.D., The Ferns, Weybridge, and Mentone.

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Elected

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1861* BLAKE, THOMAS WILLIAM, Hurstbourne Tarrant, Andover, Hants.

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1866 BLEASE, THOMAS, Clairville, Altrincham, Cheshire.

1860 BLOOD, MICHAEL, 3, Boyne terrace, St. Helier's, Jersey.

O.F. BLOXAM, WILLIAM, M.D., 21, Mount street, Grosvenor square, W. *Council*, 1875.

1874 BODDAERT, GUSTAV, M.D., Surgeon to the Civil Hospital, and to the Lunatic Asylum, Ghent, Belgium.

1868 BOGGS, ALEXANDER, M.D., late of H.M.'s Madras Army, 362, Rue St. Honoré, Paris.

1872 BOSWORTH, JOHN ROUTLEDGE, Sutton, Surrey.

1866 BOULTON, PERCY, M.D., Physician for Out-patients to the Samaritan Free Hospital; 6, Seymour street, Portman square, W.

1877 BOWKETT, THOMAS EDWARD, 239, East India Road, Poplar, E.

1869 BOYD, HERBERT, Assistant-Surgeon, Indian Army, Fort William, Calcutta [agents, Henry S. King and Co., 65, Cornhill].

1872 BRACEY, CHARLES J., M.B., 71, Hagley road, Edgbaston, Birmingham.

1873 BRAITHWAITE, JAMES, M.D., Lecturer on Midwifery and Diseases of Women and Children at the Leeds School of Medicine; Assistant Surgeon to the Leeds Hospital for Women and Children; Little Woodhouse, Leeds. *Vice-Pres.* 1877.

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1862 BRAITHWAITE, WILLIAM, M.D., late Lecturer on Midwifery, Leeds School of Medicine; Clarendon House, 20, Clarendon road, Leeds. *Council*, 1869-70.

1875 BRANSON, JOHN, Rotherham, Yorkshire.

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1862 BRICKWELL, JOHN, Sawbridgeworth, Herts.

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1868 BROWN, ANDREW, L.R.C.P. Ed., Elton villa, Bartholomew road, Kentish town, N.W.

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1872 BUCKINGHAM, CHARLES E., M.D., Professor of Obstetrics in Harvard University; Consulting Physician to the Boston Lying-in Hospital; 53, Worcester street, Boston, Massachusetts, U.S.

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1867 BURNETT, CHARLES, M.B., Biggleswade, Bedfordshire.

1862 BURTON, JOHN MOULDEN, F.R.C.S., Lee park lodge, Lee, Kent, S.E. *Council*, 1868-69.

1864 BUTLER, FREDERICK JOHN, M.D., Surgeon to Winchester College and St. Cross Hospital, and to the Hants County Hospital, Winchester. *Hon. Loc. Sec.*

1870 BUTLER, JOHN M., M.D., Physician to the Royal Kent Dispensary, and to the Woolwich Dispensary; 6, Queen's terrace, (28) Woolwich Common, S.E.

1868 BUTT, WILLIAM FREDERICK, L.R.C.P. Lond., 25, Park street, Park lane, W. *Council*, 1876-77.

1861 CANDLISH, HENRY, M.D., Physician to the Alnwick Infirmary, Bondgate street, Alnwick, Northumberland.

1861 CANDY, JOHN, M.D., Staff-Surgeon, Army Medical Department. [*Per* Messrs. Price and Boustead, Army Agents, 34, Craven street, Strand, W.C.]

1872 CARLESS, EDWARD NICHOLLS, M.B., C.M., Lansdowne grove, Devizes, Wilts.

Elected

1863 CARLYLE, DAVID, M.D., 2, The Crescent, Carlisle.

1861 CARTER, ALBERT PLEYDELL, Wellington House, London road, Gloucester.

1872 CARTER, CHARLES HENRY, M.D., Physician to the Hospital for Women; 45, Great Cumberland place, Hyde Park, W.

1869 CASKIE, JOHN BOYD, M.D., 89, Goswell road, E.C.

1870 CAUSTON, WILLIAM HENRY, Hepworth lodge, 3, Westcroft place, Hammersmith.

1863 CAYZER, THOMAS, Mayfield, Aigburth, Liverpool.

1873 CHADWICK, JAMES R., M.A., M.D., Physician to the Department of Diseases of Women, Boston City Hospital, and to the Dispensary for Diseases of Women; Marlboro' street, Boston, Massachusetts, U.S.

1875 CHAFFERS, EDWARD, F.R.C.S., 54, North street, Keighley, Yorkshire.

1873 CHALMERS, JOHN, M.D., 43, Caledonian road, N.

1864 CHAMBERS, THOMAS, F.R.C.P. Ed., F.R.C.S. Ed., Senior Physician to the Chelsea Hospital for Women, Consulting Physician Accoucheur to the Western Maternity; 64, Chester square, S.W. *Council*, 1874-6.

1876 CHAMPNEYS, FRANCIS HENRY, M.A., M.B. Oxon., 11, Wyndham place, Bryanston square, W.

1859 CHANCE, EDWARD JOHN, F.R.C.S., Surgeon to the Metropolitan Free Hospital and City Orthopædic Hospital; 59, Old Broad street, City, E.C.

1862 CHAPMAN, WALTER, F.R.C.S., Lower Tooting, Surrey.

1867* CHARLES, T. EDMONDSTOUNE, M.D., Professor of Midwifery at the Calcutta Medical College, 10, Harrington street, Calcutta, *Hon. Loc. Sec.*

1874 CHARLESWORTH, JAMES, 27, Birch terrace, Hanley, Staffordshire.

1865* CHARLTON, EGBERT, M.D.

1863 CHAVASSE, PYE HENRY, F.R.C.S., Priory House, 12, The Square, Birmingham, and 214, Hagley road, Edgbaston.

Elected

1868 CHILD, EDWIN, New Malden, Kingston-on-Thames, Surrey.

1863* CHISHOLM, EDWIN, Camden, near Sydney, New South Wales. [Per Henry K. Edge, Esq., 16, Philpot lane, E.C.].

1859 CLAREMONT, CLAUDE CLARKE, Millbrook House, 1, Hampstead road, N.W.

1859 CLARK, JAMES FENN, 13, Clarendon square, Leamington. *Hon. Loc. Sec.*

1874 CLARK, JAMES HENRY, L.R.C.P. Ed., Long Hill, Goschen, P. O., St. Elizabeth, Jamaica.

1862 CLARKE, JOHN, Lynton, North Devon.

1872 CLARKE, WILLIAM MICHELL, late Surgeon to the British General Hospital; 2, York buildings, Clifton, Bristol.

O.F. CLAY, CHARLES, M.D., late Lecturer on Midwifery and Clinical Medicine in St. Mary's Hospital, Manchester; Audenshaw Lodge, Audenshaw, near Manchester. *Council*, 1863-65.

1876 CLAY, GEORGE LANGSFORD, West View, 443, Moseley road, Birmingham.

O.F. CLAY, JOHN, Professor of Midwifery, Queen's College, Birmingham; Allan House, 138-9, Steelhouse lane, Birmingham. *Council*, 1868-69. *Vice-Pres.* 1872-4.

O.F. CLEVELAND, WILLIAM FREDERICK, M.D., Stuart villa, 199, Maida vale, W. *Council*, 1863-64. *Vice-Pres.* 1875-77.

1877 CLIFTON, NATHANIEL HENRY, F.R.C.S.E., Consulting Surgeon to the Islington Dispensary; 20, Cross Street, Islington, N.

1861 CLOGG, STEPHEN, East Looe, Cornwall.

1865* COATES, CHARLES, M.D., Physician to the Bath General and Royal United Hospitals; 10, Circus, Bath.

1860 COCKELL, EDGAR, Holly lodge, Forest road, Dalston, N.E.

1859 COCKELL, FREDERICK EDGAR, 144, Amherst road, Hackney, N.E.

Elected

1875 COFFIN, RICHARD JAS. MAITLAND, M.R.C.P. Ed., Valetta, Malta [Fairlawn, Fulham, S.W.].

1875 COLE, RICHARD BEVERLY, M.D. Jefferson Coll. Philad., San Francisco, California, U.S.

1876 COLEMAN, MATTHEW OWEN, M.D., 5, Victoria terrace, Surbiton, Surrey.

1873 CONCANON, WILLIAM AUGUSTUS, L.K.Q.C.P. Ireland; Ladway Villa, Pill, near Bristol, Somersetshire.

1866 COOMBS, JAMES, M.D., Bedford.

1873 COOPER, FRANK W., Leytonstone, Essex.

1874 COOPER, HERBERT, L.R.C.P. Ed., Hampstead.

1861 COOPER, JOHN, M.R.C.P. Ed., Clapham rise, S.W.

1872 COOTE, MICHAEL, M.D., 15, Ivanhoe terrace, Ashby-de-la-Zouch.

1865 COPEMAN, EDWARD, M.D., Physician to the Norfolk and Norwich Hospital; Upper King street, The Close, Norwich. *Council*, 1869-71. *Vice-Pres.*, 1873-5. *Hon. Loc. Sec.*

1875 CORDES, AUG., M.D., Professor of Obstetrics at the University of Geneva; 60, Rue du Rhone, Geneva.

1866 CORNWALL, JAMES, F.R.C.S., Fairford, Gloucestershire.

1860 CORRY, THOMAS CHARLES STEUART, M.D., Senior Surgeon to the Belfast General Dispensary; 146, Donegall Pass, Belfast. *Council*, 1867. *Hon. Loc. Sec.*

1859 CORY, FREDERICK CHARLES, M.D., Portland villa, Buckhurst hill, Essex. *Council*, 1867-69.

1875 CORY, ROBERT, M.B., Assistant Obstetric Physician to St. Thomas's Hospital; Palace road, Albert Embankment, S.E.

1863 COWARD, JOHN W., Christchurch, Canterbury, New Zealand [agents: Messrs. Arthur Hill and Sons, 101, Southwark street, S.E.]. *Hon. Loc. Sec.*

1869 COX, RICHARD, L.R.C.P. Ed., Theale, near Reading.

1877 CRAWFORD, JAMES, L.K.Q.C.P.I., Ightham, Sevenoaks.

Elected

1876 CREW, JOHN, Higham Ferrers, Northamptonshire.

1859 CROFT, J. MCGRIGOR A. T., M.D., M.R.C.P., 15, Abbey road, St. John's Wood, N.W.

1866 CROFT, ROBERT CHARLES, L.R.C.P. Ed., 204, Camden road, N.W.

1874 CROMBIE, CHARLES MANN, M.B. & C.M., 9, Union terrace, Aberdeen.

1860 CROSS, RICHARD, M.D., Carlton House, Belmont road, Scarborough, Yorkshire. *Hon. Loc. Sec.*

1869 CROSS, ROBERT SHACKLEFORD, Petersfield, Hants.

1867 CROUCHER, HENRY, West Hill, Dartford, Kent.

1876 CROUDACE, J. H., Assistant Medical Officer, East Riding Asylum, Beverley, Yorkshire.

1875 CULLINGWORTH, CHARLES JAMES, Surgeon to St. Mary's Hospital, Manchester; 260, Oxford street, Manchester.

1859 CULPEPER, WILLIAM MOE, 1, Brunswick terrace, Palace gardens, Kensington, W.

1862 CUMBERBATCH, LAURENCE TRENT, M.D., 25, Cadogan place, Belgrave square, S.W. *Council*, 1868-70.

1875 CUNDELL, GEORGE RICHARD, Portswood House, Kew.

1867 CUOLAHAN, HUGH, M.D., 9, Grange road, Bermondsey, S.E.

1859 CURGENVEN, J. BRENDON, 11, Craven hill gardens, Bayswater, W. *Council*, 1870-72.

1868 DALY, FREDERICK HENRY, M.D., 101, Queen's road, Dalston, N.E. *Council*, 1877.

1870 DANIEL, WILLIAM ABBOT, Kingston-on-Thames.

1876 DAVIES, GOMER, L.R.C.P. Ed., 66, Pembridge villas, Bayswater, W.

1877 DARSON, SAMUEL HOUSTON, M.D., 203, Maida Vale, W.

O.F. DAVIS, JOHN HALL, M.D., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery and Diseases of Women and Children at, the Middlesex Hospital; Physician to the Royal Maternity Charity; Consulting Physician-Accoucheur to the St. Pancras Infirmary; 24, Harley street, Cavendish square, W. *Council*, 1859, 1864-65, 1869-76. *Vice-Pres.* 1861-63. *Pres.* 1867-68.

Elected

1863 DAVIS, ROBERT ALEX., M.D., Resident Physician, County Asylum, Burntwood, near Lichfield, Stafford.

1873 DAVISON, FRANCIS, L.R.C.P. Ed., Russel street, Armagh.

1859 DAY, WILLIAM HENRY, M.D., Physician to the Samaritan Free Hospital for Women and Children; 10, Manchester square, W. *Council*, 1873-75.

1872 DENTON, GEORGE BAGSTER, Surgeon to the Ladies' Charity and Lying-in Hospital; 2, Abercromby square, Liverpool.

1860 DICKENSON, JOHN, F.R.C.S., Hon. Surgeon to the Wrexham Infirmary; Wrexham, Denbighshire.

1859 DIXON, JOHN, M.D., Melbourne Lodge, Anerley road, Anerley, S.E.

O.F. DRAGE, CHARLES, M.D., Hatfield, Herts. *Council*, 1861-4.

1875 DREW, WALTER HENRY, M.R.C.P. Ed., 2, Ospringe road, Kentish town, N.W.

1859 DRUITT, WILLIAM, F.R.C.S., Wimborne, Dorset.

1876 DUKE, GEORGE AMOS, 87, Harrow road, W.

O.F. DUNCAN, JAMES, M.B., 8, Henrietta street, Covent garden, W.C. *Council*, 1873-74.

1859 DUNCAN, PETER CHARLES, M.D., 32, New Cross road, Hatcham Park, S.E.

O.F. DUNN, ROBERT, F.R.C.S., 31, Norfolk street, Strand, W.C. *Council*, 1860. *Vice-Pres.* 1861-62.

1871 EASTES, GEORGE, M.B., F.R.C.S., Surgeon-Accoucheur to the Western General Dispensary; 69, Connaught street, Hyde park square, W.

1866 EASTON, JOHN, M.D., 19, Norfolk Crescent, Hyde park, W.

1867 EDIS, ARTHUR W., M.D., Assistant-Physician-Accoucheur to the Middlesex Hospital; Physician to the British Lying-in Hospital; 22, Wimpole street, W. *Council*, 1873-74. *Hon. Sec.* 1874-77.

1876 ELISCHER, JULIUS, M.D., Assistant Physician to the University of Buda-Pest, v. Badgasse 4, Buda-Pest, Hungary.

Elected

1862 ELLISON, JAMES, M.D., Surgeon to H.M.'s Household, Windsor; 14, High street, Windsor, Berks. *Council*, 1873-75.

1873 ENGELMANN, GEORGE JULIUS, A.M., M.D., 3003, Locust street, St. Louis, Missouri, U.S.

1873 EVANS, MAURICE GRIFFITH, M.D., Cardiff.

1871 EVANS, THOMAS WALTER, 101, Heyworth street, Everton, Liverpool.

1875 EWART, JOHN HENRY, Surgeon to St. Mary's Hospital for Women and Children; Limefield House, Cheetham hill, Manchester.

1875 EYRLEY, JOSEPH FREDERICK, L.R.C.P. Lond., 5, Hill-park crescent, Plymouth.

1865 FAIRBANK, THOMAS, M.D., Surgeon to H.M. the Queen and the Royal Household, Windsor Castle; Moulsey House, Sheet street, Windsor, Berks.

1859 FAIRCLOTH, RICHARD, F.R.C.S., Newmarket, Cambridgeshire.

1876 FARNCOMBE, RICHARD, 40, Belgrave street, Balsall heath, Birmingham.

1869 FARQUHAR, WILLIAM, M.D., Surgeon-Major, Madras Army, Bangalore, Madras Presidency. [24, Pembroke gardens, Kensington.]

1861 FARR, GEO. F., L.R.C.P. Ed., Slade House, 175, Kennington road, S.E.

1868 FEGAN, RICHARD, M.D., 1, Charlton park terrace, Old Charlton, Kent.

1872 FERGUSSON, ALEXANDER, M.D., F.R.C.S. Ed., Briarbank, Tweedvale, Peebles, N.B.

1872 FERNIE, HENRY MORTLOCK, Park green, Macclesfield, Cheshire.

1861 FETHERSTON, GERALD H., M.D.; Hon. Physician to the Melbourne Lying-in Hospital, Prahran, Melbourne, Victoria. *Hon. Loc. Sec.*

1873 FINEGAN, JAMES HERBERT, M.D., 48, Rodney street, Liverpool.

Elected

1876 FINLAY, DAVID W., M.D., Middlesex Hospital.

1870 FISHER, JOHN MOORE, M.D., 2, Balmoral terrace, Anlaby road, Hull.

1873 FITCH, SIMON, M.A., M.D., 259, West 23rd street, New York City, U.S.

1874 FITZRAYNE, WILLIAM ALLEN, 10, Freeschool street, Horselydown, S.E.

1868 FLETCHER, EDWARD, Lygon street, Carlton, Melbourne, Victoria.

1876 FORBES, LITTON, Clarence Club, 1, Regent street, S.W.

1877 FOW, JAMES, M.D., Eltham, Kent.

1865 FOWLER, JAMES, F.S.A., Hon. Surgeon to the Clayton Hospital and Wakefield General Dispensary; 13, South Parade, Wakefield. *Council*, 1872-4. *Hon. Loc. Sec.*

1866 FOX, CORNELIUS BENJAMIN, M.D., Medical Officer of Health, Maldon Union Sanitary District, Chelmsford, Essex.

1862 FRAIN, JOSEPH, M.D., Hon. Surgeon to the South Shields Dispensary; Frederick street, South Shields.

1861 FRANKLAND, THOMAS THRUSH, Surgeon to the Ripon Dispensary, North House, Ripon, Yorkshire.

1875 FRASER, ANGUS, M.D., 232, Union street, Aberdeen.

1874 FRASER, ROBERT MACLEAN, L.R.C.P. Ed., 6, North terrace, Northgate, Darlington.

1867 FREEMAN, HENRY W., 24, Circus, Bath.

1867 FRYER, CHARLES, L.K.Q.C.P.I.; Sherburn, East Riding, Yorkshire.

1867 FULLER, CHARLES C., 33, Albany street, Regent's park, N.W.

1874* GALABIN, ALFRED LEWIS, M.A., M.D., Assistant-Physician to the Hospital for Sick Children; Assistant Obstetric Physician to Guy's Hospital; 14, St. Thomas's street, Southwark, S.E. *Council*, 1876-77.

1863 GALTON, JOHN H., M.D., Woodside road, Upper Norwood, S.E. *Council*, 1874-6.

1872 GARDNER, W., M.A., M.D., 525, St. Joseph street, Montreal.

Elected

1863 GARMAN, HENRY VINCENT, Kent House, 6, Bow road, E.

1876 GARNER, JOHN, 85, New Hall street, Birmingham.

1873 GARTON, WILLIAM, M.B., F.R.C.S., Hardshaw street, St. Helen's, Lancashire.

1859 GASKOIN, GEORGE, 7, Westbourne park, W. *Council*, 1870-72.

1875 GAWITH, J. JACKSON, 23, Westbourne park terrace, W.

1869 GEIKIE, WALTER B., M.D., F.R.C.S. Ed., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the University of Trinity College, Toronto, Ontario, Canada.

1859 GERVIS, HENRY, M.D., F.R.C.P., Obstetric Physician to, and Lecturer upon Obstetric Medicine at, St. Thomas's Hospital; Physician to the Royal Maternity Charity; 13, St. Thomas's street, Southwark, S.E. *Council*, 1864-66. *Hon. Sec.* 1867-70. *Vice-Pres.* 1871-3.

1866 GERVIS, FREDERICK HEUDEBOURCK, 1, Fellows road, Haverstock hill, N.W. *Council*, 1877.

1875 GIBBINGS, ALFRED THOMAS, M.D., 93, Richmond road, Dalston, N.E.

1874 GIBSON, JAMES EDWARD, Bath road, West Cowes, Isle of Wight.

1866 GIDDINGS, WILLIAM KITTO, L.R.C.P. Ed., Shaftesbury House, Calverley, near Leeds, Yorkshire.

1877 GIFFARD, DOUGLAS WILLIAM, 44, Old Steyne, Brighton.

1875 GILES, PETER BROOME, L.R.C.P. Ed., Staunton-on-Wye, Hereford.

1876 GILL, JOHN, M.D., L.R.C.P. Ed., 17, Sackville street, W.; and 17, Cedars road, Clapham common, S.W.

1869 GILL, WILLIAM, L.R.C.P. Lond., 11, Russell square, W.C.

1867 GITTINS, JOHN, L.R.C.P. Ed., St. Olave's Union, Parish street, Southwark, 134, Tooley street, S.E.

1871 GODDARD, EUGENE, L.R.C.P. Lond., 27, Pentonville road, N.

1876 GODFRAY, ALFRED CHARLES, M.B., L.R.C.P. Ed., 45, La Motte street, Jersey.

Elected

1877 GODSON, CHARLES, F.R.C.S., Barnet.

1871 GODSON, CLEMENT, M.D., C.M., Assistant Physician-Accoucheur to St. Bartholomew's Hospital; Physician to the Samaritan Free Hospital; 8, Upper Brook street, Grosvenor square, W. *Council*, 1876-77.

1868 GODWIN, ASHTON, M.D., 28, Brompton crescent, Brompton, S.W.

1873 GOLDSMITH, JOHN, M.D., Highworth House, Liverpool gardens, Worthing, Sussex.

1873 GOODCHILD, NATHANIEL, L.R.C.P. Ed., 9, Highgate road, N.W.

1869 GOSS, TREGENNA BIDDULPH, 36, The Paragon, Bath.

1875 GRAY, JAMES, M.D., 15, Newton terrace, Glasgow.

1874 GREENE, WILLIAM THOMAS, M.A., L.K.Q.C.P.I., 218, Old Kent road, S.E.

1863 GRIFFITH, G. DE GORREQUER, Physician to the Hospital for Women and Children, Pimlico; Physician-Accoucheur to St. Saviour's Maternity; 9, Lupus street, St. George's square, S.W.

1869 GRIFFITH, JOHN T., M.D., Talfourd House, Camberwell.

1870 GRIGG, WILLIAM CHAPMAN, M.D., Physician to the In-patients, Queen Charlotte's Lying-in Hospital; Assistant Obstetric Physician to the Westminster Hospital; Assistant-Physician to the Victoria Hospital for Children; 6, Curzon street, Mayfair. *Council*, 1875-77.

O.F. GRIMSDALE, THOS. F., L.R.C.P. Ed., Consulting Surgeon to the Lying-in Hospital, and late Lecturer on Diseases of Children, &c., at the Royal Infirmary School of Medicine; 29, Rodney street, Liverpool. *Council*, 1861-62. *Vice-Pres.* 1875-76.

1876 GRINFIELD-COXWELL, JOHN EDWARD, L.K.Q.C.P.I., 3, Liverpool terrace, Worthing, Sussex.

1876 GROOM, CHARLES FREDERIC, M.D., 1, Hawley road, N.W.

1876 GROTH, ERNST R. G., M.D., 5, Weymouth street, Portland place, W.

Elected

1865 GWYN, GEORGE F., Westcroft House, Hammersmith, W.

1876 HABGOOD, HENRY, Sussex House, Bolton road, Eastbourne, Sussex.

1867 HADAWAY, JAMES, L.R.C.P. Ed., 47B, Welbeck street, Cavendish square, W.

1876 HADDEN, JOHN, M.D., 31, West street, Horncastle, Lincolnshire.

O.F. HALL, ALFRED, M.D., Senior Physician to the Brighton Dispensary; 30, Old Steyne, Brighton. *Council*, 1864-65. *Vice-Pres.* 1866-68. *Hon. Loc. Sec.*

1859 HALL, FREDERICK, 1, Jermyn street, St. James's, S.W.

1867 HALL, JOHN HENRY WYNNE, L.R.C.P. Ed., 47, Canterbury road, Kilburn park, N.W.

1871 HALLOWES, FREDERICK B., Redhill, Reigate, Surrey.

1876 HAMMOND, CHARLES, 9, George street, Manchester square, W.

1874 HANNAN, FRANCIS JOHN, M.B., Avonside, Downton, Wilts.

1860 HARDEY, KEY, Surgeon to the West City Dispensary; 4, Wardrobe place, Doctors' Commons, E.C.

1872 HARDING, WILLIAM, F.R.C.S., 4, Percy street, Bedford square, W.C.

1877 HARPER, GERALD S., St. George's Hospital, Hyde park corner, S.W.

O.F. HARPER, PHILIP H., F.R.C.S., 30, Cambridge street, Hyde park, W.

O.F. HARRINSON, ISAAC, F.R.C.S., Castle street, Reading, Berks. *Council*, 1862-65. *Hon. Loc. Sec.*

1862 HARRIS, CHARLES, M.D., Northiam, Ashford, Kent.

1871 HARRIS, CHARLES JAMES, 11, Kilburn Priory, N.W.

1872 HARRIS, HENRY, M.D., F.R.C.S., Trengweath place, Redruth, Cornwall.

1867 HARRIS, WILLIAM H., M.D., Professor of Midwifery in the Madras Medical College, and Superintendent of the Lying-in Hospital, Madras [agent: Mr. H. K. Lewis, Gower street].

1861 HARRIS, WILLIAM JOHN, 13, Marine Parade, Worthing. *Hon. Loc. Sec.*

Elected

1865 HARVEY, ROBERT, M.D., Civil Surgeon of Bhurtpore, near Agra, India [*viâ* Bombay]. [Per Messrs. Cochran and Anderson, 152, Union street, Aberdeen.]

1873 HATHERLY, HENRY REGINALD, L.R.C.P. Ed., Wellington street, Park side, Nottingham.

1865 HAYES, HAWKESLEY ROCHE, Basingstoke, Hants.

1873 HAYES, THOMAS CRAWFORD, M.D., Assistant Obstetric Physician to King's College Hospital; 17, Clarges street, Piccadilly, W. *Council*, 1876-77.

1876 HEBBLETHWAITE, JAMES EDWARD, M.D., Bawtry, Yorkshire.

1867 HEMBROUGH, JOHN WILLIAM, Ivy cottage, Waltham, Grimsby.

1870 HENDERSON, ALEXANDER, 2, Meadow Bank place, Rose vale, Partick, Glasgow.

1876 HERMAN, GEORGE ERNEST, 20, Finsbury square, E.C.

1860 HESS, AUGUSTUS, M.D., Physician to the Jews' Hospital, Norwood; 14, Artillery place, Finsbury square, E.C.

O.F. HEWITT, GRAILY, M.D., F.R.C.P., Professor of Midwifery in University College, London, and Obstetric Physician to University College Hospital; 36, Berkeley square, W. *Hon. Sec.* 1859-64. *Treas.* 1865-66. *Vice-Pres.* 1867-68. *Pres.* 1869-70. *Council*, 1871-76.

1862 HEWITT, TOM SMITH, M.D., Ivy Cottage, Winkfield, Windsor, Berks.

1867 HICKINBOTHAM, JAMES, L.R.C.P. Ed., 10, Nechells park road, Birmingham.

1876 HICKS, EDWARD JOHN W., M.B., C.M., 24, George street, Hanover square, W.

1860 HICKS, JOHN BRAXTON, M.D., F.R.C.P., F.R.S., Physician-Accoucheur to, and Lecturer on Midwifery and the Diseases of Women and Children at, Guy's Hospital; 24, George street, Hanover square. *Council*, 1861-2, 1869, 1873-76. *Hon. Sec.* 1863-65. *Vice-Pres.* 1866-68. *Treas.* 1870. *Pres.* 1871-2.

Elected

1860 HIGGS, THOMAS FREDERIC, L.R.C.P. Ed., 194, High street, Dudley, Worcestershire.

1872 HILLIARD, ROBERT HARVEY, M.D., 5, Belgrave terrace, Upper Holloway, N.

1868 HIME, THOMAS WHITESIDE, M.B., 217, Glossop road, Sheffield.

1876 HOAR, WILLIAM, Maidstone.

1865 HODDER, EDWARD M., M.D., F.R.C.S, Professor of Obstetrics, &c., Trinity College, Toronto; Consulting Surgeon, Toronto General Hospital; and Senior Physician-Accoucheur to the Burnside Lying-in Hospital; Toronto, Canada West. *Hon. Loc. Sec.*

O.F. HODGES, RICHARD, M.D., F.R.C.S., 16, Orchard street, Portman square, W.

1864 HOFFMEISTER, WILLIAM CARTER, M.D., Surgeon to the Queen in the Isle of Wight; Clifton House, Cowes, Isle of Wight. *Council*, 1877.

1871 HOGG, FRANCIS ROBERTS, M.D., India.

1874 HOGGAN, GEORGE, M.B., 7, Trevor terrace, Rutland gate, S.W.

1876 HOLDEN, J. SINCLAIR, M.D., Sudbury, Suffolk.

1876 HOLLAND, NEVILLE, Hadwen House, Victoria road, Kilburn, N.W.

1875 HOLLINGS, EDWIN, L.R.C.P. Ed., 36, Euston square, N.W.

1859 HOLMAN, CONSTANTINE, M.D., Barons, Reigate, Surrey. *Council*, 1867-69. *Vice-Pres.* 1870-71.

1860 HOLMAN, HENRY MARTIN, M.D., Hurstpierpoint, Sussex.

1864 HOOD, WHARTON PETER, M.D., 65, Upper Berkeley street, Portman square, W.

1872 HOPE, WILLIAM, M.D., Physician to Queen Charlotte's Lying-in Hospital; 5, Bolton row, Mayfair, W. *Council*, 1877.

1874 HOPKINS, ALFRED BOYD, 180, Shoreditch, E.

1876 HORSMAN, GODFREY CHARLES, 22, King street, Portman square, W.

Elected

1861 HORTON, GEORGE EDWARD, Castle street, Dudley, Worcestershire.

1864 HOUGHTON, HENRY GEORGE, L.K.Q.C.P. Ireland; 6, Mount street, Grosvenor square, W.

1876 HUE, JUDE, M.D., 15, Rue Jeanne d'Arc, Rouen, France.

1859 HUTCHINSON, JONATHAN, F.R.C.S., Surgeon to the London Hospital; 15, Cavendish square, W. *Council*, 1869-71.

1870 HUTHWAITE, CHARLES, L.R.C.P. Ed., Stratford square, Nottingham.

1861 HUTTON, CHARLES, M.D., Physician to the General Lying-in Hospital; 26, Lowndes street, Belgrave square, S.W.

1876 IRWIN, JOHN ARTHUR, B.A., M.B., Brooks's Bar, Manchester.

1864 JACKSON, EDWARD, M.B., Surgeon to the Sheffield Hospital for Women; Fern Bank, Glossop road, Sheffield. *Hon. Loc. Sec.*

1864 JACKSON, ROBERT, M.D., 53, Notting hill square, W.

1876 JAKINS, ISAAC NEGUS, 32, Osnaburg street, Regent's park, N.W.

1873 JAKINS, WILLIAM VOSPER, L.R.C.P. Ed., Sturt street, Ballarat, Victoria. [Per Isaac N. Jakins, Esq., 32, Osnaburg street, Regent's park.]

1872 JALLAND, ROBERT, Horncastle, Lincolnshire.

1872 JAMES, EDWIN MATTHEWS, Surgeon to the Melbourne Hospital, Victoria; 169, Collins street east, Melbourne.

1862 JAY, FREDERICK FITZHERBERT, Great Ayton, Northallerton, Yorkshire.

1863 JENKINS, ROBERT WALKER, Fawley, Hants.

1859 JENNINGS, JOSEPH C. S., Abbey House, Malmesbury, Wilts.

1876 JOHNSON, CHARLES HENRY, 18, Westbourne place, Eaton square, S.W.

1877 JOHNSON, SAMUEL, M.D., 5, Hill street, Stoke-upon-Trent.

1861 JONES, EDWARD, M.D., 48, Sydenham Park, Kent.

1868 JONES, EVAN, Ty-Mawr, Aberdare, Glamorganshire.

Elected

1859 JONES, GEORGE, 12, New Hall street, Birmingham.

1868 JONES, JOHN, 60, King street, Regent street, W.

1874 JONES, JOHN THOMAS, L.K.Q.C.P. I., Brookside, Llanfyllin, Montgomeryshire. [179, Brixton road, S.W.]

1876 JONES, LESLIE, M.D., C.M., 5, Brighton parade, Blackpool.

1873 JONES, PHILIP W., Baker street, Enfield, Essex.

1873 JONES, THOMAS EYTON, Surgeon to the Denbigh Infirmary; Grosvenor Lodge, Wrexham.

1870 JONES, WILLIAM, late of Glynneath, Neath, Glamorganshire.

1868 JORDAN, WILLIAM ROSS, Surgeon to the Birmingham Hospital for Women; Manor House, Moseley, near Birmingham.

1875 JUKES, AUGUSTUS, M.B. Trin. Coll. Toronto; St. Catherine's, Ontario.

O.F. KEELE, GEORGE THOMAS, 81, St. Paul's road, Highbury, N.

1874 KEMPSTER, WILLIAM HENRY, L.R.C.P. Ed., Oak House, Bridge Road, Battersea.

1872 KENNEDY, JOHN EDWARD, M.B., Lecturer on Medical Jurisprudence, Trinity College, Toronto; 242, Richmond street, West Toronto, Canada.

1865* KERNOT, GEORGE CHARLES, M.D., 5, Elphinstone road, Hastings, Sussex.

1872 KERR, NORMAN S., M.D., F.L.S., 42, Grove road, Regent's park, N.W.

O.F. KIALLMARK, HENRY WALTER, 66, Prince's square, Westbourne grove, W.

1869 KINGSFORD, C. DUDLEY, M.D., Upper Clapton, N.E.

1860 KINGSFORD, EDWARD, F.R.C.S., Surgeon to the Sunbury Dispensary; Sunbury, Middlesex.

1862 KIRKPATRICK, JOHN RUTHERFORD, M.B. Dubl., Examiner in Midwifery, Royal College of Surgeons, Ireland; 4, Upper Merrion street, Dublin. *Council*, 1872-4.

1872* KISCH, ALBERT, 2, Circus place, Finsbury, E.C.

1867 KNAGGS, HENRY GUARD, M.D., 189, Camden road, N.W.

Elected

1877 KNIGHT, CHARLES FREDERICK, 8, Northampton square, Clerkenwell, E.C.

1876 KNOTT, CHARLES, L.R.C.P. Ed., Ashford House, Mile End, Portsmouth.

1874 KOCH, EDWIN L., M.D., Lecturer on Midwifery in the Ceylon Medical School, Columbo, Ceylon.

1872 KONRÁD, MARK, M.D., The Vienna Hospital, Vienna, Austria; and Gross-Wardein, Hungary.

1876 LANCHESTER, HENRY THOMAS, M.D., Park House, Park lane, Croydon, Surrey.

1867 LANGFORD, CHARLES P., 187, Goswell road, E.C.

O.F. LANGMORE, JOHN CHARLES, M.B., F.R.C.S., 20, Oxford terrace, Hyde park, W. *Council*, 1861-64. *Vice-Pres.* 1869-71.

1866 LANGSTON, THOMAS, L.R.C.P. Ed., 29, Broadway, Westminster, S.W.

1862 LANPHIER, RICHARD, M.B. Dubl., Alford, Lincolnshire.

1872 LATTEY, JAMES, 23, St. Mary Abbott's terrace, Kensington, W.

1875 LAWRENCE, ALFRED EDWARD AUST, M.D., Physician-Accoucheur to the Bristol General Hospital; 15, Richmond hill, Clifton, Bristol.

1873 LAWTON, HERBERT A., Longfleet, Poole, Dorsetshire.

1867 LEAF, WALTER, Surgeon to the St. Marylebone General Dispensary; 14, Furnival's Inn, Holborn, E.C.

1875 LEE, FRANCIS BOYNTON, F.R.C.P. Ed., The Elms, Heckmondwike, Normanton, Yorkshire.

1876 LEIGHTON, WALTER HENRY, M.D., Lowell, Massachusetts, U.S.

1860 LEISHMAN, WILLIAM, M.D., Physician to the University Lying-in Hospital, Regius Professor of Midwifery in the University of Glasgow; 11, Woodside crescent, Glasgow. *Council*, 1866-68. *Vice-Pres.* 1869-70.

1872 LEONARD, CROSBY, Surgeon to the Bristol Royal Infirmary; Rockleigh House, White Ladies road, Clifton, Bristol.

Elected

1868 Leslie, William Burnup, M.D., Stonehaven, Kincardineshire.

1874 Lewis, Charles Francis, L.R.C.P. Ed., Bromfield House, Henfield, Sussex.

1874 Lewis, Henry Harman Dendy, 120, Drummond street, Euston square, N.W.

1875 Liebman, Carlo, M.D. Vienna, Principal Surgeon, Trieste Civil Hospital, Trieste, Austria.

1876 Lilley, George Herbert, Coventry and Warwickshire Hospital; Coventry.

1873 Lindsay, W. B., M.D., Strathroy, Ontario, Canada.

1874 Lithgow, Robert Alexander Douglas, L.R.C.P. Ed., 13, North Brink, Wisbeach, Cambridgeshire.

1868 Llewellyn, Evan, L.R.C.P. Ed., 9, Mount place, London Hospital, E.

1872* Lock, John Griffith, M.A., Lansdowne House, Tenby.

1859 Lombe, Thomas Robert, M.D., Bemerton, Torquay.

1870 Long, Mark, M.D., 185, Amhurst road, Hackney, N.E.

1874 Longrigg, Dean, Dulwich road, Penge, S.E.

1874 Louttit, James, M.D., Trafalgar road, Greenwich, S.E.

1866 Lovegrove, Charles, M.D., The Oaks, Hythe, Kent.

1872 Lovegrove, James F., Ightham, Sevenoaks, Kent.

1876 Lovett, Henry Albert, Assistant Medical Officer, County and City Lunatic Asylum, Powick, near Worcester.

1862 Lowe, George, F.R.C.S., Burton-on-Trent, Staffordshire.

1866 Lucey, William Cubitt, M.D., Ben Rhydding, near Leeds, Yorkshire.

1873 Lush, William John Henry, L.R.C.P.Ed., Fyfield House, Andover.

1869 Lydall, Wykeham H., L.R.C.P. Ed., 19, Mecklenburgh square, W.C.

1876 Maberly, William Henry, M.B., C.M. Edinb,, St. Bartholomew's Hospital.

Elected

1871 McCallum, Duncan Campbell, M.D., Professor of Midwifery and Diseases of Women and Children, McGill University; Physician to the University Lying-in Hospital; and Physician to the Montreal General Hospital; Montreal, Canada.

1874 McCallum, John Henry, M.B. Toronto, Resident Physician at the Toronto General Hospital, Canada.

1873 Macdonald, John Alexander, M.D., Woburn, Bedfordshire.

O.F. Mackinder, Draper, M.D., Consulting-Surgeon to the Gainsborough Dispensary; Gainsborough, Lincolnshire. *Council*, 1871-3.

1872 MacMordie, William Kirkpatrick, M.D., 1, College square east, Belfast.

1861 McVeagh, Dennis, L.K.Q.C.P. Ireland, 33, Bishop street, Coventry, Warwickshire.

1866 Maddever, John Coombe, M.D., 19, Battery place, Rothesay.

1859 Madge, Henry M., M.D., 4, Upper Wimpole street, W. *Council*, 1863-65. *Vice-Pres.* 1872-4.

1871 Malins, Edward, M.D., Hon. Medical Officer to the Birmingham Lying-in Charity and Surgeon to the Birmingham and Midland Hospital for Women; 8, Old Square, Birmingham.

1876 Manby, Frederick Edward, 10, King street, Wolverhampton.

1876 Manders, Horace, St. Mary's Hospital, Paddington, W.

1868 March, Henry Colley, M.D., 2, West street, Rochdale.

1860 Marley, Henry Frederick, Padstow, Cornwall.

1859 Marley, Richard, 100, Trafalgar road, Peckham, S.E.

1862 Marriott, Robert Buchanan, Swaffham, Norfolk.

1876 Marshall, Francis John, Resident Medical Officer to St. George's Hospital.

O.F. Marshall, John Brake, Nightingale road downs, Clapton, N.E.

1871 Martin, Edward, Senior Surgeon to the Weston-super-Mare Hospital; Victoria House, Weston-super-Mare.

Elected

1873 MARTIN, HENRY CHARRINGTON, M.B., C.M., 11, Somers place, Hyde park, W.

1864 MARTIN, LAWRENCE J., M.D., Physician to the Melbourne Lying-in Hospital; 126, Collins street east, Melbourne, Victoria.

1875 MASON, JOHN WALLIS, 1, Osnaburgh terrace, Regent's park, W.

1866 MATTEI, ANTOINE, M.D., Professor of Midwifery, Rue Thérèse 4, Paris.

1861 MATTHEWS, JOHN, M.D., 30, Colebrook row, Islington, N.

1867 MAY, HENRY, L.R.C.P. Lond., Coniston House, Birchfield row, Aston, Birmingham.

O.F. MEADOWS, ALFRED, M.D.; Physician-Accoucheur to, and Lecturer on Midwifery at, St. Mary's Hospital; 27, George street, Hanover square, W. *Council*, 1862-64. *Hon. Sec.* 1865-66. *Hon. Lib.* 1865. *Treas.* 1867-69. *Vice-Pres.* 1874-6.

1875 MILES, ABIJAH J., M.D., Professor of Diseases of Women and Children in the Cincinnati College of Medicine, Cincinnati, Ohio, U.S.

1871 MILLER, HUGH, M.D., Physician-Accoucheur to the Glasgow Maternity Hospital; 298, Bath crescent, Bath street, Glasgow.

1871 MILLER, JOHN FAURE, M.D., 28, Rue de Matignon, Faubourg St. Honoré, Paris. *Hon. Loc. Sec.*

1876 MILLMAN, THOMAS, M.D., Woodstock, Ontario, Canada.

1876 MILSON, RICHARD HENRY, 88, Finchley road, South Hampstead, N.W.

1869 MILWARD, JAMES, 27, Charles Street, Cardiff.

1869 MINNS, PEMBROKE R. J. B., M.D., Thetford, Norfolk.

1867 MITCHELL, ROBERT NATHAL, M.D., 1, Amersham park villas, New Cross, Kent.

1873 MONCKTON, MARSHALL, L.F.P.S. Glasg., Calverley parade, Tunbridge Wells.

Elected

1873 MOON, ROBERT HENRY, F.R.C.S., Fern Lodge, Lower Norwood.

1869 MOORE, JOSEPH, M.D., Counser villa, Balham, S.W.

1859 MOORHEAD, JOHN, M.D., Surgeon to the Weymouth Infirmary and Dispensary; Weymouth, Dorset.

1863 MORGAN, EDWARD, 15, Park street, Llanelly, Caermarthenshire.

1869 MORGAN, W. H., Surgeon 23rd Regiment, Tinilon, Travancore.

1871 MORRISON, JOHN R., L.R.C.P. Ed., 57, Cannon street road, E.

1875 MORTON, RICHARD JOHN, Aylsham, Norfolk.

O.F. MURRAY, GUSTAVUS CHARLES P., M.D., Obstetric Physician to the Great Northern Hospital; 66, Great Cumberland place, Hyde park, W. *Council*, 1864-65. *Hon. Sec.* 1866-69. *Vice-Pres.* 1870-72. *Treas.* 1873-77.

O.F. MUSGRAVE, JOHNSON THOMAS, L.R.C.P. Ed., Irlam villa, 39, Finchley road, N.W. *Council*, 1859-60.

1875 MUSGRAVE, REGINALD VERNON, St. Mary's Hospital.

1876 NAPIER, ALEX. DISNEY LEITH, M.B., C.M., Fraserburgh, Aberdeenshire.

1859 NAPPER, ALBERT, Broad Oak, Cranleigh, Guildford, Surrey. *Council*, 1866-68.

1863 NASON, JOHN JAMES, M.B. Lond., 11, Bridge street, Stratford-on-Avon.

1859 NASON, RICHARD BIRD, Nuneaton, Warwickshire.

1859 NEAL, JAMES, M.D., late Hon. Surgeon to the Lying-in Hospital, Birmingham; Barcelona House, Sandown, Isle of Wight.

1866 NEILD, JAMES EDWARD, M.D., Lecturer on Forensic Medicine, Melbourne University; 166, Collins street east, Melbourne.

1876 NESBITT, DAWSON, M.D., 34, Cambridge place, Hyde Park, W.

1876 NEWHAM, JAMES, 49, Welbeck street, W.

Elected

1859 NEWMAN, WILLIAM, M.D., Surgeon to the Stamford and Rutland Infirmary; Barn Hill House, Stamford, Lincolnshire. *Council*, 1873-75. *Vice-Pres.* 1876-77.

1872 NIBLETT, FRANCIS D., L.R.C.P. Ed., The Grove, Hackney, N.

1861 NICHOLS, GEORGE W., Augusta House, Rotherhithe, S.E.

1873 NICHOLSON, ARTHUR, M.B. Lond., 45, Norfolk square, Brighton.

1876 NIX, EDWARD JAMES, L.R.C.P. Ed., 37, Upper Marylebone street, W.

1876 OAKES, CHARLES, M.B. and C.M., Oak Villa, Russell road, Leamington.

1868 OATES, PARKINSON, M.D., 164, Cambridge street, Eccleston square, S.W.

1876 OGSTON, FRANCIS, Junr., M.D., 156, Union street, Aberdeen.

O.F. OLDHAM, HENRY, M.D., F.R.C.P., Consulting Obstetric Physician to Guy's Hospital; 4, Cavendish place, Cavendish square, W. *Vice-Pres.* 1859. *Council*, 1860, 1865-66, 1868-76. *Treas.* 1861-62. *Pres.* 1863-64. *Trustee.*

1859 OLDHAM, JAMES, F.R.C.S., Consulting-Surgeon to the Brighton Lying-in Institution; 53, Norfolk square, Brighton. *Council*, 1866-68.

1869 ORD, GEORGE RICE, Streatham hill, Surrey.

1875 ORPEN, ARTHUR HERBERT, A.B., L.K.Q.C.P.S., Springfield, Boswells, Chelmsford.

1877 OSTERLOH, PAUL RUDOLPH, M.D., Leipzic, Dresden.

1863 OSWALD, JAMES WADDELL JEFFRIES, L.R.C.P. Ed., 245, Kennington road, S.E.

1875 OWEN, WILLIAM, 201, Bethnal green road, E.

1869 OXLEY, MARTIN G. B., L.K.Q.C.P.I., 80, Rodney street, Liverpool.

1859 PALFREY, JAMES, M.D., Obstetric Physician to, and Lecturer on Midwifery and the Diseases of Women and Children at, the London Hospital; Physician to the General Lying-in Hospital; 29, Brook street, Grosvenor square, W.

Elected

1873 PARKER, ROBERT WILLIAM, 8, Old Cavendish street, W.

1867 PARKS, JOHN, The Wylde, Bury, Lancashire.

1873 PARKS, LUTHER, A.M., M.D., Boston, United States. [Agents: Messrs. McCalmont Brothers & Co., Bankers, 15, Philpot lane, E.C.]

1872 PARR, GEORGE, 18, Upper Phillimore place, Kensington, W.

1876 PARSONS, JOHN HANBURY, M.D., Yorkville, Toronto, Ontario, Canada.

1874 PATERSON, ALEXANDER, M.D., Bahia, Brazil [*per* Mr. Walter Greig, 19, Birchin lane, E.C.].

1865* PATERSON, JAMES, M.D., Hayburn Bank, Partick, Glasgow.

1875 PAUL, ERNEST WATSON, L.K.Q.C.P.I., Glastonbury and Street, Somerset.

1874 PAYNE, WILLIAM S. HELE, 87, Queen's Road, Peckham, S.E.

1864 PEARSON, DAVID RITCHIE, M.D., 23, Upper Phillimore place, Kensington, W.

1871 PEDLER, GEORGE HENRY, 6, Trevor terrace, Rutland gate, S.W.

O.F. PEIRCE, RICHARD KING, Surgeon to the Notting hill and Shepherd's Bush Dispensary, 16, Norland place, Notting hill, W.

1873 PEREZ, DIEGO, M.D., Montevideo, South America [*per* A. K. Mackinnon, Esq., care of Messrs. John Clinch & Sons, 9, Austin Friars, E.C.]

1871 PERRIGO, JAMES, M.D., 591, St. Catherine street, Montreal, Canada. *Hon. Loc. Sec.*

1871 PHILPS, PHILIP GEORGE, 4, Queen's road, Peckham, S.E.

1876 PICARD, P. KIRKPATRICK, M.D., 59, Abbey road, St. John's Wood, N.W.

1874 PIGG, THOMAS, M.D., Physician to the Manchester Southern Hospital for Women and Children; 75 Piccadilly, Manchester.

1876 PIGGOT, ALLEN, L.R.C.P. Ed., Beckenham, Kent.

Elected

1866 PILCHER, WILLIAM JOHN, 43, High street, Boston, Lincolnshire.

1864 PLAYFAIR, W. S., M.D., F.R.C.P., Professor of Obstetric Medicine in King's College, and Obstetric Physician to King's College Hospital; 31, George street, Hanover Square, W. *Council*, 1867. *Hon. Librarian*, 1868-9. *Hon. Sec.* 1870-72. *Vice-Pres.*, 1873-6.

O.F.* POLLARD, WILLIAM, Surgeon to the Torbay Hospital; Southlands, Torquay, Devon.

1877 POOLE, S. WORDSWORTH, M.D., Dunedin, Sidcup, Kent.

1876 POPE, H. CAMPBELL, M.B. Lond., Bromsgrove Villa, Gold Hawk road, Shepherd's Bush.

1864 POTTER, JOHN BAPTISTE, M.D., Obstetric Physician to, and Lecturer on Midwifery and the Diseases of Women at, the Westminster Hospital; 20, George street, Hanover square, W. *Council*, 1872-6. *Hon. Lib.* 1877.

1859 POUND, GEORGE, Odiham, Hants.

1875 POWDRELL, JOHN, 75, Euston road, N.W.

1863 POWELL, JOSIAH T., M.D., 347, City road, E.C.

1864 PRICE, WILLIAM NICHOLSON, Lecturer on Midwifery and the Diseases of Women and Children at the Leeds School of Medicine; 7, East parade, Leeds. *Council*, 1876-77.

1863 PRICE, WILLIAM PRESTON, M.D., Surgeon to the Metropolitan Infirmary for Scrofulous Children, Margate; 1, Ethelbert Crescent, Margate. *Hon. Loc. Sec.*

O.F. PRIESTLEY, WILLIAM O., M.D., F.R.C.P., Consulting Obstetric Physician to King's College Hospital; and Consulting Physician-Accoucheur to the St. Marylebone Infirmary; 17, Hertford street, Mayfair, W. *Council*, 1859-61, 1865-66. *Vice-Pres.* 1867-69. *Pres.* 1875-76.

1876 QUIRKE, JOSEPH, L.R.C.P. Ed., The Oaklands, Hunter's lane, Handsworth, Birmingham.

O.F. RADFORD, THOMAS, M.D., Consulting Physician to St. Mary's Hospital, Manchester; Moor field, Higher Broughton, Manchester. *Vice-Pres.* 1859.

Elected

1859 RAMSAY, JOHN ALLEN, L.R.C.P. Ed., The Lawn, Great Shelford, Cambridge.

O.F. RANDALL, JOHN, M.D., Lecturer on Medical Jurisprudence, St. Mary's Hospital Medical School; Medical Officer, St. Marylebone Infirmary; 35, Nottingham place, W. *Council*, 1877.

1861 RASCH, ADOLPHUS A. F., M.D., Physician for Diseases of Women to the German Hospital; Physician to the Training Hospital, Tottenham; 7, South street, Finsbury square, E.C. *Council*, 1871-3.

1870 RAY, EDWARD REYNOLDS, Dulwich.

1860* RAYNER, JOHN, M.D., Swaledale House, Quadrant road north, Highbury New Park, N.

1859 RAYNES, HENRY, Gringley-on-the-hill, Bawtry, Yorkshire.

1871 READ, CHARLES, M.B., 1, St. George's square, Regent's park road, N.W.

1876 REDMOND, CHARLES STENNETT, L.K.Q.C.P.I., 30, Molendine terrace, Jackson street, Gateshead.

1874 REES, WILLIAM, Priory House, Queen's Crescent, Haverstock hill, N.W.

1875 REID, MATTHEW, L.R.C.P. Ed., 97, Blue Anchor road, Bermondsey, S.E.

O.F. REMINGTON, THOMAS, M.D., Visiting Medical Officer to the S. Lambeth and Brixton Dispensary; Alexandra Lodge, 89, Angell road, Brixton, S.W.

1875* REY, EUGENIO, M.D. of Turin, 92, Capole case, Rome.

1862 RICHARDS, DAVID, 72, Park road, Brighton, Sussex.

1859 RICHARDS, SAMUEL, M.D., 36, Bedford square, W.C. *Council*, 1864-66.

1862 RICHARDS, S. SMITH C., 36, Bedford square, W.C.

O.F. RICHARDSON, RICHARD, L.R.C.P. Ed., Bryngwy, Rhayader, Radnorshire.

1872 RICHARDSON, WILLIAM L., M.D., A.M., Instructor in Clinical Obstetrics in Harvard University; Visiting Physician to the Boston Lying-in Hospital; 76, Boylston street, Boston, Massachusetts, U.S.

Elected

1871 RICKARD, FREDERICK MARTYN, Assistant-Surgeon 25th Madras Native Infantry, Cavanore.

1872 RIGDEN, GEORGE, Surgeon to the Canterbury Dispensary; Burgate street, Canterbury.

1871 RIGDEN, WALTER, 8, Montpellier square, S.W.

O.F.* ROBERTS, DAVID LLOYD, M.D., Physician to St. Mary's Hospital, Manchester; 23, St. John's street, Deansgate, Manchester. *Council*, 1868-70. *Vice-Pres.* 1871-2. *Hon. Loc. Sec.*

1867 ROBERTS, DAVID W., M.D., 56, Manchester street, Manchester square, W.

1860 ROBERTS, ROBERT PRICE, Shamrock House, Rhyl, Flintshire.

1874 ROBERTSON, WILLIAM BORWICK, M.D., West Dulwich, S.E.

O.F. ROBINSON, THOMAS, M.D., 35, Lamb's Conduit street, W.C.

1876 ROE, JOHN WITHINGTON, M.D., Ellesmere, Salop.

1875 ROGERS, AMOS, M.D. Ottawa, L.R.C.P. Ed.; P. O. Box 110, Ottawa, Ontario, Canada.

O.F. ROGERS, WILLIAM RICHARD, M.D., Physician to the Samaritan Free Hospital; 56, Berners street, Oxford street, W. *Council*, 1870-72.

1874 ROOTS, WILLIAM HENRY, Canbury House, Kingston-on-Thames.

1860 ROPER, ALFRED GEORGE, 57, North End, Croydon, Surrey. *Hon. Loc. Sec.*

1874 ROPER, ARTHUR, 17, Granville park, Blackheath.

1865 ROPER, GEORGE, M.D., Physician to the Royal Maternity Charity; 6, West street, Finsbury circus, E.C. *Council*, 1875-77.

1859 ROSE, HENRY COOPER, M.D., High street, Hampstead, N.W. *Council*, 1875-77.

O.F. ROUTH, CHARLES HENRY FELIX, M.D., Physician to the Samaritan Free Hospital for Women and Children; 52, Montagu square, W. *Council*, 1859-61. *Vice-Pres.* 1874-6.

Elected

1874 ROWAN, THOMAS, L.R.C.P. Ed., Hon. Physician to the Lying-in Hospital, Melbourne, Victoria.

1870 RUSSELL, LOGAN D. H., M.D., 8, Alfred street, Gt. George street, Liverpool.

1866 SABOIA, V., M.D., Rio de Janeiro.

1864 SALTER, JOHN H., D'Arcy House, Tolleshunt D'Arcy, Kelvedon, Essex.

1875 SALZMANN, FREDERICK WILLIAM, 18, Montpellier road, Brighton.

1868* SAMS, JOHN SUTTON, St. Peter's Lodge, Eltham road, Lee, Kent.

1872 SANGSTER, CHARLES, 15, Lambeth terrace, S.E.

1875 SATCHELL, WALTER ALFRED, M.R.C.P. Ed., Groombridge, near Tunbridge Wells.

1870 SAUL, WILLIAM, M.D., 4, Charlotte street, Fitzroy square, W.

1863 SAVAGE, HENRY, M.D., Consulting Physician to the Samaritan Hospital for Women, Lower Seymour street, Portman square; 14, Bentinck street, W. *Council*, 1871-2.

1872 SAVAGE, THOMAS, M.D., Surgeon to the Birmingham and Midland Hospital for Women; 12, Old square, Birmingham.

1877 SAVORY, CHARLES TOZER, M.D., 1, Douglas road, Canonbury, N.

O.F. SCOTT, JOHN, F.R.C.S., 49, Harley street, Cavendish square, W. *Council*, 1868-70. *Vice-Pres.* 1871-3.

1870 SCOTT, JOHN, M.D., New street, Sandwich.

1876 SCOVIL, FRANCIS S., St. John's, New Brunswick, Canada.

1863 SEQUEIRA, HENRY LITTLE, 1, Jewry street, Aldgate, E.C.

1866 SEQUEIRA, JAMES SCOTT, 34, Leman street, Goodman's fields, E.

1875 SETON, DAVID ELPHINSTONE, M.D., 12, Thurloe place, South Kensington.

1860 SEWELL, CHARLES BRODIE, M.D., 21, Cavendish square, W., and 13, Fenchurch street, E.C.

Elected

1862 SHARMAN, MALIM, Surgeon to the Birmingham Free Hospital for Sick Children; 18, New Hall street, Birmingham.

1876 SHARPE, GEORGE METCALFE, Grove House, Hunslet, Leeds.

O.F. SHARPIN, HENRY WILSON, F.R.C.S., Surgeon to the Bedford General Infirmary, Bedford. *Council*, 1871-3.

1869 SHAW, HENRY SISSMORE, 88, Upgate, Louth, Lincolnshire.

O.F. SHEARMAN, EDWARD JAMES, M.D., F.R.C.S., F.R.S. Ed., Consulting Physician to the Rotherham Hospital; Moorgate, Rotherham, Yorkshire.

1859 SHEEHY, WILLIAM HENRY, L.R.C.P. Ed., 4, Claremont square, Pentonville, N.

1875 SHELDON, EDWIN MASON, Surgeon to Stanley Hospital; 223, Boundary street, Liverpool.

1867 SHEPHERD, FREDERICK, L.R.C.P. Ed., 33, King Henry's road, Primrose hill, N.W.

1859 SHIPTON, WILLIAM PARKER, Consulting Surgeon to the Devonshire Hospital; Buxton, Derbyshire.

1861 SHORTT, JOHN, M.D., Surgeon H.M. Madras Army, and Superintendent-General of Vaccination, Madras Presidency. *Hon. Loc. Sec.* [Agents: Messrs. Baring, Brothers, 8, Bishopsgate within, E.C.]

1874 SIMPSON, GEORGE ALEX. MALCOLM, M.D., Hampstead lane, Highgate, N.

1874 SINCLAIR, ALEXANDER DOULL, M.D., late Physician to the Boston City Hospital; 35, Newbury street, Boston, Massachusetts, U.S.

1876 SIRIGNANO, GIOSUE, M.D., 24, Strada Banchi Nuovi, Napoli.

1874 SKINNER, STEPHEN, M.B., Edgecliffe, Clevedon, Somerset.

1876 SLOAN, SAMUEL, M.D., C.M., 4, Canning place, Stirling road, Glasgow.

1861 SLOMAN, SAMUEL GEORGE, Farnham, Surrey.

1861 SLYMAN, WILLIAM DANIEL, 26, Caversham road, Kentish Town, N.W.

Elected

1860 SMART, THOMAS TOVEY, L.R.C.P. Ed., South Villa, Bedminster, Bristol.

1859 SMILES, WILLIAM, M.D., Surgeon to the House of Correction, Cold Bath Fields; 44, Bedford square, W.C.

1876 SMITH, HENRY BARTON LIDDELL, M.B. and C.M., 3, Queen street, Mayfair, W.

1867 SMITH, HEYWOOD, M.D., Physician to the Hospital for Women, Soho square, and Physician to the British Lying-in Hospital; 2, Portugal street, Grosvenor square, W. *Council*, 1872-5.

1873 SMITH, JOSEPH, 43, David place, St. Helier's, Jersey.

O.F. SMITH, PROTHEROE, M.D., Physician to the Hospital for Women, Soho square; 42, Park street, Grosvenor square, W.

1875 SMITH, RICHARD THOMAS, M.D., Assistant-Physician to the Hospital for Women, Soho square; 21, Haverstock hill, N.W.

1875 SMITH, ERNEST LOUIS TYLER, M.A., M.B. Cant., Hounslow.

1859 SMITH, WILLIAM JOHNSON, M.D., Consulting Physician to the Weymouth Infirmary and Dispensary; Greenhill, Weymouth, Dorset. *Council*, 1869-71.

1876 SNEGIEREFF, WOLDEMAR, M.D., Professor of Gynæcology in the University of Moscow.

1876 SNELL, EDMUND GEORGE CARRUTHERS, 59, Stepney green, and 163, Mile End road, E.

1866 SOPER, WILLIAM, Medical Officer, Jews' Hospital, Norwood; 4, Clapham rise [283, Clapham road], S.W.

1869 SPAULL, BARNARD, F.R.C.S., Essex House, Vale place, Hammersmith, W.

1868 SPAULL, BARNARD E., 2, Vale place, Hammersmith, W.

1872 SPENCE, JAMES BEVERIDGE, M.D., Earlswood Asylum, Red Hill, Surrey.

1859 SPENCER, GEORGE, 8, Kensington park road, W.

1876 SPENCER, LIONEL DIXON, M.D., Bengal Army [care of Messrs. Grindlay and Co., 55, Parliament street].

Elected

1862 SPRY, G. FREDERICK HUME, M.D., Assistant-Surgeon, 2nd Life Guards, Army and Navy Club, S.W.

1876 SPURGIN, FREDERICK WILLIAM, L.R.C.P. Ed., 14, Henrietta street, Cavendish square, W.

1876 SPURGIN, HERBERT BRANWHITE, 49, Abington road, Northampton.

1876 SPURRELL, FLAXMAN, L.R.C.P. Ed., Belvedere, Kent.

O.F. SQUIRE, WILLIAM, M.D., M.R.C.P., 6, Orchard street, Portman square, W. *Council*, 1866-68. *Vice-Pres.* 1876-77.

1866 STEELE, ARTHUR BROWNE, L.K.Q.C.P. Ireland, Lecturer on Midwifery, Royal Infirmary School of Medicine; 54, Rodney street, Liverpool. *Council*, 1874-6.

1873 STEELE, EDWARD HARRY.

1873 STEWART, JAMES, M.D., 2, Skinner street, Whitby, Yorkshire.

1875* STEWART, WILLIAM, L.R.C.P. Ed., Highfield House, Barnsley, Yorkshire.

1876 STEWART, WILLIAM EDWARD, 16, Harley Street, W.

1859 STONE, JOSEPH, M.D., 175, Upper Brook street, Manchester.

O.F. STOWERS, NOWELL, 125, Kennington park road, Kennington, S.E.

1875 STRANGE, FREDERIC WILLIAM, Langley Lodge, Aurora, Ontario, Canada.

1866 STRANGE, WILLIAM HEATH, M.D., 2, Belsize avenue, Belsize park, N.W.

1871 STURGES, MONTAGUE J., M.D., Elmstone House, Beckenham, Kent.

1862 SUTTON, FIELD FLOWERS, M.D., Balham hill, Clapham, S.W.

1859 SWAYNE, JOSEPH GRIFFITHS, M.D., Physician-Accoucheur to the Bristol General Hospital; Harewood House, 74, Pembroke road, Clifton, Bristol. *Council*, 1860-61, *Vice-Pres.* 1862-64. *Hon. Loc. Sec.*

1859 SYMONDS, FREDERICK, M.A., F.R.C.S., Surgeon to the Radcliffe Infirmary; 35, Beaumont Street, Oxford. *Council*, 1862-65. *Hon. Loc. Sec.*

Elected

1871 TAIT, LAWSON, F.R.C.S. Ed. and Eng., L.R.C.P. Ed.; Surgeon to the Birmingham and Midland Hospital for Women, and to the Lying-in Charity; Consulting Surgeon to the Church Stretton Asylum for Ladies; 7, Great Charles street, Birmingham.

1866 TANNAHILL, ROBERT DUNLOP, M.D., Physician to the Lying-in Hospital; Eden Villa, Lenzie, near Glasgow.

1871 TANNER, JOHN, M.D., F.L.S., Physician for Diseases of Women, to the Farringdon General Dispensary, and Obstetric Physician to the Lying-in Charity, Holborn; Alfred House, Newington Causeway, S.E.

1859 TAPSON, ALFRED JOSEPH, M.B. Lond., 36, Gloucester gardens, Westbourne terrace, W. *Council*, 1862-64.

1863 TAPSON, JOSEPH ALFRED, Surgeon to the Clapham General Dispensary; 83, High street, Clapham, S.W.

1871 TAYLER, FRANCIS F., B.A. Lond., and M.B., Claremont villa, 224, Lewisham road, S.E.

O.F. TAYLOE, EDWARD, South lodge, Clapham common, S.W.

1870 TAYLOR, ARTHUR, M.B., 180, Kennington park road, S.E. [Marton, Province of Wellington, New Zealand.]

O.F. TAYLOR, CHARLES, M.D., Pine house, Camberwell green, S.E. *Council*, 1869-71.

1859 TAYLOR, DAVID, 180, Kennington park road, S.E.

1869 TAYLOR, JOHN, Earl's Colne, Halstead, Essex.

1871 TAYLOR, JOHN W., M.D., 34, Queen street, Scarborough.

1862 TAYLOR, THOMAS, F.R.C.S., 19, Bennett's hill, Birmingham. *Council*, 1875-77.

1872 TEMPLE, JAMES ALGERNON, M.D., Lecturer on Midwifery, Trinity College, Toronto.

1862 THANE, GEORGE DANCER, M.D., 15, Montague street, Russell square, W.C.

1872 THOMAS, JAMES BYER, Assistant-Surgeon H.M.'s Indian Army, Madras, and Zillah Surgeon, Tinnevelly.

1870 THOMPSON, JOHN ASHBURTON, M.D., 207, Caledonian road, N. *Council*, 1877.

Elected

1867 THOMPSON, JOSEPH, 24A, Regent street, Nottingham.

1869 THOMPSON, D. R., M.D., Officiating Civil Surgeon, 26th Native Infantry, Trichinopoly. [Messrs. de Beaux & Co., Esplanade Dispensary, Black Town, Madras.]

1874 THOMSON, WILLIAM, M.D., Consulting Surgeon, Peterborough Infirmary, Westgate, Peterborough.

1867 THORBURN, JOHN, M.D., Lecturer on Midwifery, Manchester Royal School of Medicine; 333, Brighton place, Oxford street, Manchester. *Council*, 1876-77.

1860 THORNE, GEORGE LEWORTHY, M.D., Swanage, Dorset.

1862 THORNTON, WILLIAM HENRY, M.D., Springfield terrace, Dewsbury, Yorkshire.

1867 THORNTON, WILLIAM HENRY, Surgeon to the Royal National Hospital for Scrofula; Berkeley Lodge, Margate.

1874 TICEHURST, AUGUSTUS ROWLAND, Silchester House, Pevensey Road, St. Leonard's-on-Sea.

1873 TICEHURST, CHARLES SAGE, Bishop's Waltham, Hants.

1860 TIFFEN, ROBERT, M.D., Wigton, Cumberland.

1866 TILLEY, SAMUEL, 70, Union road, Rotherhithe, S.E.

O.F. TILT, EDWARD JOHN, M.D., Consulting Physician-Accoucheur to the Farringdon General Dispensary; 27, Seymour street, Portman square, W. *Council*, 1867-68, 1875-6. *Vice-Pres.* 1869-70. *Treas.* 1871-2. *Pres.* 1873-4.

O.F. TIMES, HENRY G., 23, Manchester street, Manchester square, W.

1872 TOLOTSCHINOFF, N., M.D., Kieff, Russia [*per* M. N. Orloff, 57, Mount street, Grosvenor square, W.].

1869 TOMKINS, CHARLES P., L.K.Q.C.P.I., Beddington park, Croydon.

1870 TOWNE, ALEXANDER, Junr., 364, Kingsland road, N.E.

1876 TREDENNICK, WILLIAM MAGEE, M.D., M. Ch., 51, Warwick road, South Kensington, W.

Elected

1872 TRENHOLME, EDWARD HENRY, M.A., M.D., C.M., Professor of Midwifery, University of Bishop's College, Montreal, Canada.

1873 TRESTRAIL, HENRY ERNEST, F.R.C.S., L.R.C P. Ed., 6, Trinity terrace, Victoria road, Aldershot.

1872 TUCHMANN, MARO, M.D., 148, Adelaide road, Haverstock hill, N.W.

1865 TURNER, JOHN SIDNEY, Surgeon to the Anerley Dispensary, Stanton House, Anerley road, Upper Norwood, Surrey.

1861 TWEED, JOHN JAMES, Junr., F.R.C.S., 14, Upper Brook street, W.

1874 UNDERHILL, THOMAS, M.D., Summerfield, West Bromwich, Staffordshire.

1860 VARENNE, EZEKIEL G., Kelvedon, Essex.

1874 VENN, ALBERT JOHN, M.D., Senior Assistant Physician, Metropolitan Free Hospital; Assistant Physician, Victoria Hospital for Sick Children; 40, Brook street, Grosvenor square, W.

1873 VERLEY, REGINALD LOUIS, M.R.C.P. Ed., 88, Gower street, W.C.

1864 WAHLTUCH, ADOLPHE, M.D., 280, Oxford street, Manchester.

1860 WALES, THOMAS GARNEYS, Downham Market, Norfolk.

1869 WALKER, ALFRED, M.D., late Physician to the East London Hospital for Sick Children; Fore street, Hertford. *Hon. Loc. Sec.*

1877 WALKER, GEORGE, L.R.C.P., M.R.C.S., 1, St. George's place, S.W.

1866 WALKER, THOMAS JAMES, M.D., Surgeon to the General Infirmary, Peterborough; 18, Westgate, Peterborough. *Hon. Loc. Sec.*

1873 WALKER, THOMAS OSBORNE, Crick, near Rugby, Northamptonshire.

1870 WALLACE, FREDERICK, District Surgeon to the Royal Maternity Charity; 243, Hackney road, N.E.

Elected

1872 WALLACE, JOHN, M.D., Assistant-Physician to the Liverpool Lying-in Hospital; 4, Canning street, Liverpool. *Hon. Loc. Sec.*

1872 WALLER, CHARLES BEAUMONT, Sydenham, S.E.

1860 WALLER, JOHN TURPIN, Flegg Burgh, Norfolk.

1875 WALLER, WALTER KERR, Kyd street, Calcutta.

1867 WALTERS, JAMES HOPKINS, Faringdon, Berks.

1873 WALTERS, JOHN, M.B., Church street, Reigate, Surrey.

O.F. WANE, DANIEL, M.D., 20, Grafton street, Bond street, W.

1859 WARDEN, CHARLES, M.D., Hon. Surgeon to the Birmingham Lying-in Hospital; 39, Temple street, Birmingham.

1874 WARN, REUBEN THOMAS, 37, Highgate road, N.W.

1862 WATKINS, CHARLES STEWART, 16, King William street, Strand, W.C.

1861 WATTS, GEORGE HENRY, Thatcham, near Newbury, Berks.

1873 WAY, JOHN, M.D., 4, Eaton square, S.W.

1867 WEBB, FRED. E., 113, Maida vale, W.

O.F. WEBB, HENRY SPEAKMAN, Welwyn, Herts.

1872 WEBSTER, THOMAS, Malvern House, Redland, near Bristol.

1876 WEIR, ARCHIBALD, M.D., St. Mungho's, Great Malvern.

1860 WELCHMAN, CHARLES EDWARD ELLIOT, Bore street, Lichfield, Staffordshire.

1867 WELLER, GEORGE, Forest lodge, The Mall, Wanstead, Essex.

1876 WELLS, FRANK, M.D., Professor of Obstetrics and the Diseases of Women and Children in the Cleveland Medical School, Cleveland, Ohio.

1874 WELLS, HARRY, M.D., H.B.M. Vice-Consul, Gualeguaychu, Entre Rios, Argentine Confederation.

O.F. WELLS, T. SPENCER, F.R.C.S., Surgeon in Ordinary to H.M.'s Household; Surgeon to the Samaritan Free Hospital for Women and Children; 3, Upper Grosvenor street, W. *Council*, 1859. *Vice-Pres.* 1868-70. *Trustee.*

Elected

1859 WESTMACOTT, JOHN GUISE, M.D., Medical Officer to the Paddington Provident Dispensary; 19, St. Mary's terrace, Paddington, W.

1876 WHARTON, HENRY THORNTON, M.A. Oxford, 39, St. George's road, Kilburn, N.W.

1870 WHEATCROFT, SAMUEL HANSOM, L.R.C.P. Ed., Stoke Ferry, Brandon, Norfolk.

1860 WHEELER, DANIEL, Chelmsford, Essex.

1876 WHITE, BARRINGTON SYER, Langham House, Twickenham.

1873 WHITE, FREDERICK BROAD, 15, Maida vale, W.

1860 WHITE, FREDERICK GEORGE, L.R.C.P. Ed., Castle House, Chepstow, Monmouthshire.

O.F. WHITEHEAD, JAMES, M.D., Physician to the Manchester Clinical Hospital; 87, Mosley street, Manchester. *Council*, 1859-61. *Vice-Pres.* 1868-69.

1864 WHITMARSH, WILLIAM MICHAEL, M.D., M.R.C.P. Ed., Surgeon to the Hounslow Lying-in Charity: Albemarle House, Hounslow, Middlesex.

1867 WILBE, RICHARD HAYDOCK, M.D., York Lodge, 21, Finchley road, St. John's Wood, N.W.

1878 WILKINS, RICHARD, Hon. Assistant Surgeon, Madras Army, Demonstrator of Anatomy in the Medical College, Madras; Madras.

1876 WILKINSON, JOSEPH CRADOCK, 2, Bellevue terrace, Crouch End, Hornsey, N.

1871 WILKINSON, WILLIAM HENRY WHITEWAY, L.R.C.P. Ed., 268, Caledonian Road, Islington, N.

1861 WILLIAMS, ARTHUR WYNN, M.D., Physician to the Samaritan Free Hospital; 1, Montagu square, W. *Council*, 1871.

1864 WILLIAMS, EDWARD, M.D., Holt street House, Wrexham.

1867 WILLIAMS, HENRY LLEWELLYN, M.D., 9, Leonard place, Kensington, W.

1872 WILLIAMS, JOHN, M.D., Assistant-Obstetric Physician to University College Hospital; 28, Harley street, Cavendish square, W. *Council*, 1875-76. *Hon. Sec.* 1877.

Elected

1859 WILSON, JAMES GEORGE, M.D., Professor of Midwifery in the Andersonian University, Glasgow; Consulting Physician-Accoucheur to the Glasgow Maternity Hospital; 9, Woodside crescent, Glasgow. *Council*, 1863-64. *Vice-Pres.* 1865-67.

1873 WILSON, JOHN HENRY, L.K.Q.C.P. Ireland, Obstetric Physician to the Ladies' Charity and Lying-in Hospital; Kensington Lodge, Kensington, Liverpool.

1860 WILSON, ROBERT JAMES, F.R.C.P. Ed., 7, Warrior square, St. Leonard's-on-Sea, Sussex. *Hon. Loc. Sec.*

1868 WILTON, JOHN, L.R.C.P. Ed., Chalk Pit House, Sutton, Surrey.

1866 WILTSHIRE, ALFRED, M.D., Assistant-Obstetric Physician to St. Mary's Hospital, and Physician for the Diseases of Women to the West London Hospital; Physician to the British Lying-in Hospital; 57, Wimpole street, Cavendish square, W. *Council*, 1870. *Hon. Lib.* 1871-3. *Hon. Sec.* 1874-6. *Vice-Pres.* 1877.

1876 WISE, ALFRED THOMAS TUCKER, House-Surgeon to St. Mary's Hospital, 4, Warlock road, W.

1872 WISE, WILLIAM CLUNIE, M.D., Gothic villa, 241, Burrage road, Plumstead, S.E.

1860 WISEMAN, WILLIAM WOOD, Springstone House, Ossett, near Wakefield, Yorkshire.

1872 WOOD, ROBERT ARTHUR HENRY, 102, Pembroke place, Liverpool.

1864 WOODMAN, WILLIAM BATHURST, M.D., Assistant-Physician to the London Hospital; 6, Christopher street, Finsbury square, E.C.

O.F. WORSHIP, J. LUCAS, Manor House, Riverhead, Sevenoaks, Kent. *Council*, 1875-77.

1876 WORTS, EDWIN, Trinity street, Colchester.

1871 YARROW, GEORGE EUGENE, M.D., 87, Old street, E.C.

1870 YEATES, GEORGE, M.D., Grove road, Walthamstow, Essex.

1874 YOUNG, DAVID, M.D., 13, Via dei Fossi, Florence, Italy.

Elected

1861 YOUNG, WILLIAM BUTLER, 10, Castle street, Reading, Berks.

1869 YULE, JOHN S. C., Castlefield House, 78, Walmsey road, Bury, Lancashire.

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ADVERTISEMENT.

THE SOCIETY is not as a body responsible for the facts and opinions which are advanced in the following papers and communications read, or for those contained in the abstracts of the discussions which have occurred, at the meetings during the Session.

53, BERNERS STREET,
OXFORD STREET, W.

OBSTETRICAL SOCIETY

OF

LONDON.

SESSION 1876.

ANNUAL GENERAL MEETING.

JANUARY 5TH, 1876.

WILLIAM O. PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

Present—59 Fellows and 8 visitors.

The ballot for the Election of Officers and Council for the year 1876 was declared open till 9 o'clock, and Dr. Galabin and Dr. Fancourt Barnes were appointed scrutineers.

Books were presented by Dr. Rt. Barnes, Dr. W. H. Byford, Dr. Championnière, Dr. James Foulis, Dr. Wm. Goodell, Dr. John Shortt, Dr. Ashburton Thompson, and the 'Gesellschaft für Geburtshülfe' of Berlin.

Dr. Fancourt Barnes and Mr. Jackson Gawith were admitted Fellows of the Society, and Mr. William Stewart, of Barnsley, was declared admitted.

Edward John W. Hicks, M.B., Charles Henry Johnson, M.R.C.S., and Francis Boynton Lee, F.R.C.P., Ed. (Heckmondwike), were elected Fellows of the Society.

The following gentlemen were proposed for election :— C. T. Brookhouse, M.D.; Martin Brunjes, M.R.C.S.; J. H. Crowdace, L.S.A.; J. N. Jakins, M.R.C.S.; Leslie Jones, M.D.; Charles Knott, M.R.C.S.; W. H. Leighton, M.D.; J. H. Parsons, M.D.; G. Sirignano, M.D.; Frank Wells, M.D.; and J. C. Wilkinson, L.S.A.

Dr. WILTSHIRE showed a new liquid extract of ergot prepared by Mr. Martindale, of New Cavendish Street. It was made with ammoniated alcohol, and was a remarkably active preparation of the drug.

Dr. AVELING presented a pair of his forceps to the Society for the museum.

Dr. EDIS exhibited a specimen of cyst in the larynx, removed *post mortem* from an infant.

The child, a female, weighing 8 lbs., was born on November 30th at 9.30 a.m., after an ordinary labour of eight hours' duration. It made from the commencement a moaning noise on respiration, and never seemed to breathe freely. The chest and throat were carefully examined, but nothing abnormal could be detected. The child seemed to experience difficulty in taking the breast, and from the first but slight hopes were entertained as to its living. It gradually sank and expired at 11 p.m. on December 1st, 1875, just thirty-seven hours and a half after its birth. At the post mortem a small cyst the size of a large bean was found springing from one side of the larynx, and pressing on the rima glottidis. No other abnormal appearances were detected.

Dr. BARNES suggested that a drawing should be made of the specimen exhibited by Dr. Edis, for the 'Transactions,' as it was one of much rarity.

Dr. SAVAGE seconded this. He thought it was very interesting.

Dr. WILTSHIRE showed for Dr. BATHURST WOODMAN a specimen of the carneous or fleshy mole with the following history.

The specimen which accompanies this was sent to him by his friend Robert Hughes, Esq., of the Red House, Woodbridge, who has an extensive practice in midwifery. The account he gives is as follows:

"The patient from whom it came, Mrs. G—, is twenty-nine years of age. Her mother had fifteen children, including two twin births in succession. She has always enjoyed good health, with the exception of a miscarriage twelve months before the present labour. At that time she was about five months pregnant. During this last pregnancy she has had no fright and no illness so far as she knew. Mr. Hughes was sent for on Saturday, August 14th, 1875, at about 9 a.m. He found the os uteri very slightly dilated. He therefore returned home, and was not called again until Sunday morning, the 15th of August. He then found the os uteri dilated to the size of a half crown, the head presenting, and labour progressing slowly. The woman was delivered of a living, healthy, and full-

grown male child at 4.30 p.m. The same day (Sunday) on examination after the birth of the child Mr. Hughes found a large tough substance about twice the size of the fist (as far as the finger could judge), and not being satisfied as to what it really was he passed his hand into the uterus, and then found he could pass it easily round this large, hard, tough substance without any obstruction, except at one part, where it appeared to be, and was, attached to the placenta. He thought it might be attached to the uterus also, and being fearful of hæmorrhage, he explored further, tracing it from the placenta. He then got his hand behind it, and removed placenta, substance, and all. It closely resembled a large kidney. The section of the mole, and also some exploration of the placenta, were made by Mr. Hughes. He had done nothing to it except examine microscopically some of the fluid in the mole, which consisted chiefly of blood-corpuscles, many of which were nucleated like those of a fœtal lamb. He thought it best to send the specimen itself as he received it. The spirit into which it was put was very strong, and he judged that it had shrunk nearly one third smaller than the original size. Although such specimens may not be very rare, he could not find a similar case in our 'Transactions,' although mentioned in all obstetric works and some pathological ones. There seemed two points of interest in this case: 1st, the hereditary proclivity to plural births, and, 2nd, the absence of any known cause for the death of one twin, the other reaching to full maturity. He understood that the mother and child had both done well, and Mr. Hughes gave him to understand that there were no symptoms of syphilis in the parents."

Dr. J. Williams inquired if there had been any threatening hæmorrhage or abortion.

Dr. Wiltshire said he could only further add that Dr. Woodman had written to him, stating that there was a distinct funis, an attempt at an anus and cranial arches, and some development of a mouth and eye or eyes.

The President thought the specimen had somewhat the appearance of a placenta succentuarata. He would be glad if

Dr. Barnes and Dr. Williams would examine the specimen in conjunction with Dr. Woodman, and report further to the Society upon it.

ON A CASE OF EXTRA-UTERINE FIBROID SUCCESSFULLY TREATED BY GASTROTOMY.

By C. H. F. Routh, M.D. Lond., M.R.C.P. & S.,
PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN; FELLOW OF UNIVERSITY COLLEGE, ETC.

Miss A. W—, æt. 29, single, first consulted me February 15th, 1872. Of delicate appearance, five feet two and a half inches tall, spare habit; she gave one the idea from her anxious look of having suffered much. The following were the particulars of the case.

In 1868 she became gradually thin and weak, with constant sick headache and heavy vomiting. In March, 1869, she first felt a small lump floating in the belly. It was the size of a hen's egg, felt superiorly on the mesial line, but only *when lying down*. It seemed always to rise forwards whether lying on right side or left side. Rapidly after this it became a great exertion to move, a feeling "as if all the muscles gave way" being experienced. There was no perceptible increase in this tumour till August, when it suddenly began to grow *very* rapidly, but as far as could be judged then, only *outwards*.

She was first examined by Dr. Richards, of Bangor, in October, who was much surprised at the excessive rapidity of its growth, for it had now attained the size of an adult head.

The belly was ordered to be painted with iodine. The tumour continued, however, to grow, but in an upward direction towards the stomach.

During all this time from October to March, 1870, she was kept on her back. Then as the recumbent position

was found to interfere with her comfortable breathing, she was ordered to sit up.

In January, 1870, the catamenia had come on heavily, but did not again recur till July, although means were tried to force it on.

In May, 1870, she consulted Dr. McClintock, of Dublin. He ordered warm salt baths and outward applications.

In August, having become very much oppressed by the tumour in every way, and often appeared to be sinking fast, she was brought to London and put under Dr. Abel Stewart's care. He treated her by very powerful external and intensely painful counter-irritants over the belly, besides giving her steel and other medicines in considerable quantity. This treatment was continued eighteen months to Christmas, 1871, without any benefit, nor did the catamenia recur during the whole of this time.

On the contrary, during the whole of 1871 her health became quite shattered, and the tumour grew in every direction.

In 1872 the treatment was given up, and the catamenia reappeared. It should be remarked that during all these years (1868 to 1872), there was no stoppage or other trouble with the bowels or kidneys, each acting regularly.

She was seen by Dr. Greenhalgh on January 3rd, and by Dr. Oldham on January 9th, 1872, but no active treatment was recommended.

She was subsequently sent to me by Mr. Sedgwick, of Park Place. When I saw her on February 15th, 1872, in addition to the facts above recorded, I learnt that for the last two years the growth of the tumour appeared arrested. There was no increase in the quantity lost at the catamenial periods; on the contrary, rather a diminution had been observed. No pain in the tumour, but sometimes a bearing-down pain, mostly after walking. Lately catamenia had been irregular, lasting six weeks off and on, and completely absent for preceding twelve months. The breasts were not painful, but occasionally larger. Slight leucorrhœa sometimes present also.

The examination of the abdomen revealed a large tumour reaching to epigastrium, and of stony hardness fully of the size of a nine months' fœtus. No murmur could be heard in any part of it, but the double cardiac sounds were transmitted through it. The tumour on palpation appeared to be made up of several lobulated masses. One lobe on the left of median line high up appeared to project on the surface, about the size of a pear, and four inches long. It was freely movable from side to side. A vaginal examination revealed Douglas's space completely filled up with the tumour. Uterus very high up. Os to be felt, just above lip, with great difficulty above pubis and near it, and towards left side. Sound passed in a little way, half an inch only, at this point. It was very remarkable, however, how perfectly *stony* the tumour appeared in Douglas's space, and a fissure could be felt dividing the tumour at this place, resembling a cranial suture. Indeed, the feel was very much that of a full-grown fœtus, with a very ossified head. The examination per vaginam was painful and difficult, owing to the presence of an intact hymen. The rectum did not appear to be interfered with.

As she was weak and rather spare I ordered generous diet, and put her upon bichloride of mercury gr. $\frac{1}{16}$, Ext. Bellad. gr. $\frac{1}{4}$, Quinæ Sulph. gr. j, mane nocteque and Liq. Calcii Chloridi (P. H. D.) ♏x, bis die augendo dos. ♏j, omne die ad ♏xl.

I next saw her on March 4th, 1872. There was very little difference in the aspect of the patient. The tumour had not enlarged. She had noticed two or three days back what she thought a new feature in her case—a projection of bone superiorly. On examination this proved only to be the ensiform cartilage. On the 20th the catamenial period made its appearance. It had been easy, free, and without clots.

On August 28th I modified the treatment. The following pill and draught were ordered :

℞ Hyd. Bichl., gr. $\frac{1}{12}$,
Ext. Nucis Vom., gr. ¼,
Ext. Hyoscy., gr. j. Pil. mane nocteque.

℞ Pot. Iod., gr. v,
Tr. Iod., ♏x,
Ammon. Carb., gr. v,
Pot. Bromidi, gr. x,
Tr. Gent., ʒij,
Eth. Chlor., ♏xv,
Inf. Gent., ʒj, bis die;

and a lotion made by adding ʒss Tr. Iod. to Oss water ordered as a vaginal injection, with Tr. Iodi applied externally to abdomen night and morning.

This treatment seemed to affect the tumour very little if at all during 1873. In the early months of that year I employed a Stöhrer's battery regularly twice a week to the abdomen. One pole was passed within the vagina and about half an inch possibly within the os; the other pole was moved along the abdomen and back for twenty minutes to half an hour twice weekly. The effect on her feelings was very different, sometimes producing intense pain, sometimes very little. The uterus, or at least the tumour, seemed to contract at times very forcibly, at other times less so. We thought and actually found it so by measurement to have become smaller, by one to one and a half inches. Her general health certainly improved, and she appeared to be passably well, except in so far as inconvenienced by the necessity of carrying this large tumour. Her weight in August, 1872, was 8 st. 7½ lbs. She returned to the country, and I did not see her again till

Oct. 23rd, 1874.—She then informed me that two months back she had suffered intense pain on left side high up, apparently over the spleen, which obliged her to use hot fomentations and to keep her bed for a week. This pain was accompanied with great dyspnœa, and the heart's action was very feeble and accompanied with palpitation. She did not consult any medical man. When the pain subsided the dyspnœa disappeared also. There was no indigestion present during this attack, only she found that

on bending forwards a great sensation of heaviness was communicated to the chest. She also lost a good deal of flesh.

Examination.—Tumour has much the same appearance and feel as before, but it seems to come lower down, while there is more bowel and flatus superiorly. At the junction of tumour and this gaseous swelling distinct fluctuation is to be felt. This fluctuation is not felt at all distinctly, if at all, below, owing to the tumour, which seems otherwise to occupy every spare portion of the abdominal cavity. The os uteri cannot be felt. No catamenia have appeared for some months. She states she makes water freely and plenty of it. Bowels not very regular. Ordered Tinct. Scillæ ℥v, Tinct. Digit. ʒss, Inf. Juniperi ʒiss, ter die. Hyd. Bichl. gr. $\frac{1}{12}$, Pulvis Aloes gr. ½, Ext. Taraxaci gr. iv, pil. o. nocte. As a drink to take whisky and water.

Oct. 31st.—Has made a great deal more water. Looks better. There is, perhaps, a little less water in the abdomen and less palpitation. Ordered to use Appollinaris water with her whisky in lieu of water, and to apply freely Tinct. Digitalis with brush over belly night and morning.

Nov. 27th.—Since last seen has had a violent cough and cold. Looks more anxious, and now complains of a little pain at the lower part of abdomen. Feels weaker. Left ankle occasionally swells at night. Ordered Empl. Lyttæ iv × v abdomini, Tinct. Digitalis ʒss, Sp. Juniperi ʒj, Syr. Ferr. Sup. ʒj, Inf. Juniperi ʒjss, ter die.

April 2nd, 1875.—I did not see this patient till to-day. She was much changed and much thinner. She stated she had had cold upon cold, and been obliged to leave off the digitalis, as it made her sleep so much. The catamenia had not made their appearance. On examination of the chest (the patient being in the sitting posture) I found that the right side extending up to the third rib was very dull on percussion. At about the right nipple it was puerile, vocal vibrations inferiorly much diminished. There was also slight œgophone. Anteriorly the back was clear.

When the patient lay down the clear sound was heard as low as the sixth or seventh rib anteriorly. Respiration perfect everywhere in left lung, perhaps rather louder than normal. Heart sounds normal. There did not appear to be so much fluid in abdomen. Tumour extended quite to epigastrium. While, therefore, it was clear we had here some hydrothorax on the right side, it was not very considerable, and the dulness appeared to be due, in measure, when she sat up to the pushing up of the liver by the tumour. Ordered

℞ Tr. Lyttæ, ♏v,
Tr. Pulsatillæ (King's), ♏xv,
Syr. Ferri Superph., ʒj,
Vin. Ipecac., ♏x,
Syr. Scillæ, ʒj,
Aquæ, ʒj, bis die.

℞ Hyd. Bichlor., gr. $\frac{1}{17}$,
Ext. Bellad., gr. ¼,
Pulv. Ipecac., gr. ½. Ft. pil. m. n. s.

9th.—The patient called to see me again to-day. She was much worse. All the former symptoms appeared aggravated. On examination of chest right side in front was found dull up to one inch above nipple. No respiration was heard below. No œgophone. Vocal vibrations absent. Above respiration puerile. She cannot lie on right side. Respiration puerile on left side. The dulness alters with movement of body. In recumbent position clear sound; it felt an inch and a half below nipple. The right side of chest measures half an inch more than left. There is more fluid in belly. The space between ensiform cartilage and pubis measures 14¾ inches. Circumference of belly at largest portion 32¾ inches. Both legs swell. Ordered Tinct. Digitalis ♏xxx, Tinct. Lyttæ ♏v, Ol. Tereb. ♏v, Sulphur ʒj, Pot. Acet. ℈j, Inf. Juniperi ad ʒjss ter die.

During the following week the patient saw in consultation with myself Drs. Scott Allison, Rogers, and Sir W.

Fergusson separately. The hydrothorax was found not to have increased, but the ascites and anasarca of both legs had immensely augmented. To relieve the patient, therefore, a preliminary tapping was recommended at once. It was also noticed that with this larger amount of fluid the tumour was more mobile, and it was now found that the pyriform body before noticed as lying on the tumour and to the left side low down was more mobile, and could be moved independently (at least to a small degree) of the tumour. This fact appeared to make an operation more practicable, as we were led to suppose that this pyriform body might prove to be the uterus.

The patient was tapped on the 23rd of April, and considering the large dimensions of the tumour a very large quantity (sixteen pints) of serum was withdrawn. The relief was marked. The legs went down very much. The clear space in the right lung was much increased. The patient progressed so well that we were preparing to operate on the 26th, when an acute attack of bronchitis supervened on the 24th. The amount of dyspnœa was much aggravated. The fluid in the abdomen and chest increased rapidly. She was obliged to sit in an armchair day and night—a circumstance which tended very much to increase the anasarca. We thought we should have lost her, but she rallied. After another consultation with Sir W. Fergusson I tapped her a second time on June 1st. As much as twenty-two pints of serum were withdrawn on this occasion, and with the greatest relief. She gradually recovered strength and power; at length an operation was decided upon.

On the 16th of June, Mr. Clover kindly giving the chloroform, and assisted by Sir W. Fergusson, Drs. Rogers, Wynn Williams, and Mr. Robinson, I proceeded to perform gastrotomy at the Cavendish Home, New Cavendish Street. An incision of about six inches was made in the linea alba, from the umbilicus to about three inches from the pubis. A large quantity of clear serum escaped. On passing the hand I found there were no adhesions, but

the tumour was so large that I had to enlarge the opening to within two inches of the ensiform cartilage, and in this manner I was able bodily to raise the entire tumour from the belly and pelvis, into the latter part of which it was prolonged by a narrowing of it, so that it correctly fitted to the cavity. The pyriform body before noticed was found to be the uterus, lengthened to about six inches, and to the right side of which the tumour was attached by a broad thin pedicle about five inches wide and about an inch and a half long. This was rather thicker inferiorly. A long Baker Brown clamp being applied, the tumour was removed by the knife, and the portion of pedicle on the clamp burned off with the actual cautery. There was no bleeding. The abdomen being now sponged out, the edges of the wound were brought together by silver wires and the patient put to bed.

The tumour which I now show you is very much contracted by the spirit and arsenic in which it has been kept. When removed from the body, and after it had been drained of some blood, it weighed 17½lbs.

16th.—The patient continued pretty comfortable. On recovering from the effects of chloroform, as she complained of a good deal of pain about the wound, twenty drops of opium were injected per anum, and repeated the same evening at 11.15, when a quantity of urine was also drawn by the catheter. Pulse rapid; temp. 102·2° Fahr. in axilla.

17th.—At 3 a.m. temperature had risen to 103·6°; she looked more flushed; pulse 144; rather restless. The water was drawn at 5 a.m., and a large quantity of urine came away. At 7 temperature 101·2°, but as she complained of more pain about the wound twenty-four more drops of laudanum were injected per anum. At 9 pulse still 144, temp. the same. At 11 water again drawn. At 11.20 temp. 100·1°. Pulse at 3 p.m. had fallen to 120. At 4 risen again to 124; temp. 101°. At 5 water drawn and twenty more drops of opium given. At 8.20 temperature was 101°; pulse 128. At 11 pulse had fallen to

120. At 11·15 water again drawn. Temperature at 12 p.m. 100·2.

18th.—The following were the variations of temperature and pulse on this day:

Hour.		Temp.		Pulse.
4 a.m.	...	100·2	...	—
7.30	...	100·2	...	128
12	...	100·4	...	—
4 p.m.	...	100·2	...	124
10.30	...	101·	...	124

The water was drawn at 4 and a large quantity taken. At 7.30 she passed water very freely by the natural efforts. Had four hours good sleep during the night.

19th.—The variations in temperature and pulse were as follows:

Hour.		Temp.		Pulse.
3 a.m.	...	102·4	...	—
7·30	...	101·2	...	—
9	...	100·	...	134
3.24 p.m.	...	101·4	...	144
6	...	100·	...	144
9	...	100·6	...	—

Has had four hours good sleep; passing immense quantities of water; œdema visibly disappearing. Urine quite clear and limpid; no albumen.

20th.—Following variations observed:

Hour.		Temp.		Pulse.
1 a.m.	...	100·	...	—
5	...	100·	...	—
9.30	...	101·	...	120
1.30 p.m.	...	101·2	...	—
4.15	...	101·4	...	120
8.30	...	100·8	...	144

The wound was dressed this morning. It was found to have united in its entire length by the first intention. No tympanitis or sickness. Facies good. A little restlessness during the day, so that twenty drops of laudanum were injected per anum at 2 a.m., and again at 12 p.m.

21st.—Variations to-day observed were :

Hour.		Temp.		Pulse.
1 a.m.	...	100·4	...	—
5.30	...	100·8	...	—
9.30	...	—	...	124
12	...	100·	...	—
4.35 p.m.	...	101·6	...	128
9	...	101·8	...	128

Has been generally more comfortable to-day. Twenty drops of laudanum given at 11 p.m.

22nd.—Variations noticed were as follows :

Hour.		Temp.		Pulse.
1.30 a.m.	...	101·4	...	—
4	...	100·4	...	—
8	...	100·8	...	120
12	...	102·	...	—
3.30 p.m.	...	101·2	...	124
6.30	...	103·	...	—
10.30	...	102·	...	126

The wound was again dressed to-day, and looked very well. No tympanitis or abdominal pains. Facies good. Urine still very copious. Œdema of extremities nearly gone. There is, however, an unusual tendency to cough.

23rd.—The patient continued pretty well up to 4 a.m., temperature at 1 a.m. being 102°, and the same at 4. She then gradually became very restless and excited; facies became more anxious. At 8 I was sent for. All the symptoms had increased in intensity. She was very hot. Skin dry and burning. Facies collapsed; very tremulous and delirious; unconscious of her whereabouts; complaining of headache and giddiness. Temperature in axilla was 105°; in vagina 107°; pulse 144. My friend, Dr. Rogers, having been called, after consultation we agreed to place her in an *ice bath*. This was done and she was kept in three quarters of an hour. Temperature in vagina on being placed in it was 106·4. After bath it fell in mouth to 100·1°, vagina 100°; pulse 124. In less than a quarter of an hour the giddiness and headache were relieved, and she became conscious. Facies became

natural. She complained of cold only at the end of the bath, having expressed great comfort at the beginning. On removal from the bath she was a little sick and vomited. At 11 temperature was 101·1°; pulse 125, but it fell by 11·50 to 96. Given beef juice occasionally in teaspoonful doses. Ice bag to head and another round neck.

Hour.		Temp.		Pulse.
1.20 p.m.	...	99·	...	116 to 118
3.20	...	100·	...	116 to 118
4.20	...	axilla 99·6	...	—
5.30	...	„ 100·	...	—
6	...	—	...	108
8.30	...	vagina 99·8	...	96
10.30	...	„ 100·	...	102

24th.—The whole of the next day the patient was better. No return of delirium. Facies much more natural. Dozing from time to time. Eating comfortably of beef juice, with occasionally a teaspoonful of brandy. She had passed two or three very offensive motions, but urine was copious and clear. No trace of œdema left. The following were variations of temperature and pulse noticed:

Hour.		Axilla.		Vagina.		Pulse.
2.30 a.m.	...	99·6	...	100·	...	88
6	...	99·6	...	100·	...	84
9.15	...	—	...	100·	...	96
12	...	99·	...	100·	...	92
2.30 p.m.	...	—	...	100·2	...	108
3.30	...	—	...	101·	...	108—110
6	...	—	...	100·6	...	106
10.30	...	—	...	101·	...	—
11	...	—	...	—	...	108

Pulse did not exceed 108, and temperature only once went up to 104° till June 30th.

25th.—The wound was again dressed, indeed from this period this was regularly done every third day. Continued well. Motions, two or three a day, free. Copious

urination. Variations in temperature and pulse as follows:

Hour.		Vagina temp.		Pulse.
4 a.m.	...	101·	...	106
8.20	...	100·	...	106
9.30	...	—	...	96
1 p.m.	...	99·2	...	93
3	...	100·4	...	102
6	...	101·3	...	102
9	...	101·2	...	108

On June 26th, 27th, and 28th there was nothing very remarkable in the symptoms; there was a little more purging, for which some charcoal was given. The temperature and pulse, however, appeared gradually to rise, as set forth in the following table:

Hour.	Temp. vagina.	Pulse.	Hour.	Temp. vagina.	Pulse.	Hour.	Temp. vagina.	Pulse.
26th.			27th.			28th.		
1 a.m.	101·2	103	1 a.m.	102·	98	1 a.m.	103.2	108
6	101·4	92	5	102·2	96	4.30	103·	104
11	101·2	106	12	101·3	102	8.30	102·2	104
3 p.m.	101·6	104	4 p.m.	102·9	116	12	102·	98
6	101·7	106	9	103·	114	3 p.m.	103·	116
9	102·	106				8	103·2	120
						10·40	103·1	110

29th.—The patient did not look so well. She was more tremulous and agitated. Very little headache, but occasionally wandered. She was therefore carefully watched. Diarrhœa was less, and urine still copious and free. The following were the changes of temperature and pulse noticed:

Hour.		Vagina temp.		Pulse.
3 a.m.	...	101·4	...	102
7.40	...	101·6	...	82
11	...	104·	...	108
4.30	...	103·	...	112
9.30	...	103·4	...	—

30th.—More restless; more tremulous; and complains

of headache; more often talks nonsense. Skin dry and hot. Facies much more anxious. Is apprehensive of evil. Bowels again freely moved; very offensive. Still no abdominal pain. An examination per vaginam revealed an indurated painful part about the size of a walnut, but no fluctuation. The temperature and pulse gradually rose as follows:

Hour.		Temp.		Pulse.
1 a.m.	...	vagina 103·6	...	—
3	...	„ 103.6	...	114
5.30	...	„ 103·	...	108
9.30	...	axilla 100·4	...	120
1 p.m.	...	vagina 101·2	...	110—112
3.30	...	„ 103·5	...	—
5.30	...	„ 104·	...	120

Apprehensive of another attack of hyperpyrexia I placed the patient a second time in an ice bath for half an hour at about 6. Temperature gradually fell to 98°, but by 11.30 it was 103° in vagina, and 100·5° in axilla; but she was better; headache had disappeared; and she felt more comfortable and rational. She was fed chiefly with beef juice, and the ice bags on head and around neck were carefully persisted in.

July 1st.—Greatly better. The following variations observed in three following days:

Hour.		Temperature. Axilla.		Temperature. Vagina.		Pulse.
July 1.—2 a.m.	...	102·2	...	103·2	...	112
6	...	100·	...	103·2	...	104
9.20	...	98·	...	101·3	...	—
1 p.m.	...	—	...	102·2	...	—
3.45	...	102·4	...	103·4	...	120
7.30	...	102·2	...	104·	...	110—112
9	...	102·	...	103·8	...	—
10.30	...	102·	...	104·	...	108
July 2.—2.30 a.m.	...	102·4	...	104·2	...	104
6.30	...	101·	...	102·2	...	—
11.45	...	99·	...	101·2	...	99
4.30 p.m.	...	102·5	...	104·4	...	112
7	...	101·9	...	104·	...	108
10.30	...	102·4	...	104·8	...	102

Hour.	Temperature. Axilla.	Temperature. Vagina.	Pulse.
July 3.—3 a.m.	102·	102·2	108
7	101·2	102·2	100
1 p.m.	100·3	102·2	104
4.30	101·8	104·	112
8	102·6	103·6	110
10.30	—	102·1	100—104

The effect of the second cold bath was not so marked as the first. The next day, as seen by the chart, a temporary reaction seemed to occur, but the pulse was generally low, and subsequently the temperature again fell.

4th.—The general symptoms in patient appeared to progress favorably; but the temperature of vagina being unusually high, a very careful examination was again made to-day. The intervagino-rectal hardness was found to be larger than when first noticed, and in the vagina a distinct point of fluctuation was observed. After consultation with Dr. Rogers, it was agreed to puncture this per vaginam with the aspirator. About four ounces of an intensely fœtid, grumous, sanguineo-purulent fluid were liberated. The abscess was now washed out with weak iodine. The patient appeared greatly relieved. The following were the variations of temperature and pulse observed for the next three days:

Hour.	Temperature. Axilla.	Temperature. Vagina.	Pulse.
July 4.—3 a.m.	100·4	101·8	100
7.30	100·2	101·6	98
12	101·2	102·2	100
4 p.m.	101·1	101·2	108
8	100·5	102·7	100—102
12	101·2	102·4	99
July 5.—4 a.m.	100·	101·6	98
8	100·6	102·2	104
3.40 p.m.	—	103·	116
8	102·2	103·2	112
10.30	—	—	106
12.30	102·	103·2	99
July 6.—4 a.m.	101·	102·6	100
8	98·	101·8	98
4 p.m.	101·5	102·5	106—108
8	102·	103·	110

7th.—The next morning the temperature in vagina rose to 104·2°. The parts were therefore again carefully examined, and the swelling between uterus and rectum was found to have again enlarged and become painful on touch. After consultation with Dr. Rogers, it was decided to open it again, but through the rectum, and to keep a drainage tube in it. This was done. About four ounces of fœtid pus were in the same manner removed by the aspirator, and the cavity washed out with a weak watery solution of iodine twice daily, through the tube. *All the wire sutures* in abdominal wound were removed to-day. One remarkable symptom had been noticed since the first formation of abscesses. The skin of the body had become very rough, while the patient herself had fearfully emaciated. Full quantities, therefore, of porter were daily given, and the most generous diet enforced.

The following were some of the variations of temperature and pulse observed:

Hour.	Temperature. Axilla.	Temperature. Vagina.	Pulse.
July 7.—1 a.m.	102·8	104·2	114
5.30	101·4	103·4	110
8	100·	102·6	110
1 p.m.	101·	101·6	86
4.45	99·7	102·4	108
10	103·	104·2	112
July 8.—8 a.m.	101·8	103·	108
7	99·	101·6	98
1 p.m.	101·2	102·4	104—106
5	101·3	103·1	103
July 9.—1 a.m.	101·2	103·	100
5	100·6	102·	100
2 p.m	101·	101·2	96
7	—	101·8	104
July 10.—1 a.m.	101·2	102·6	106
5	98·	100·	92
12	98·2	100·	100
3.30 p.m.	98·	101·	108
9.30	100·	101·2	104
12 a.m.	100·	100·8	108
July 11.—4 a.m.	98·	100·6	94
8	—	98·6	88

Hour.	Temperature. Axilla.	Temperature. Vagina.	Pulse.
July 11.—4 p.m.	96·8	100·	102
12	101·6	102·6	86
July 12.—4 a.m.	98·	98·	92
9.30	98·	98·	96
4 p.m.	97·1	99·8	102
9	97·4	99·8	90
July 13.—4 a.m.	98·	99·	88
8.30	98·	98·	84
4 p.m.	97·1	101·	92
12	98·	99·4	94
July 14.—5 a.m.	97·8	100·	92
5 p.m.	99·	99·4	98
July 15.—5 a.m.	96·	100·	86
9.30	96·4	101·	96

Moved first to different quarters on July 10th, then to a small country place on July 24th, she rapidly improved. The drainage-tube was removed on August 7th and another one substituted; and she left for her country residence on August 13th.

On August 21st she weighed 7st. 4½lbs. On August 29th, 7st. 9½lbs. On September 24th 8st., and looking quite well and healthy.

Remarks.—In reviewing this case I will call attention first to the growth as a fibroid, and the rapidity with which at times it grew, and at others evinced but slow progress. No cause appears evident from the history of this case; but we know this difference in rapidity of growth is common in other cases.

2nd. In regard to diagnosis, three circumstances may be mentioned; each seemed to make it probable the tumour was extra-uterine. 1st, its extreme mobility; 2nd, the entire absence of menorrhagia; 3rd, the absence of a souffle in it, almost invariably present in those cases where the uterus itself is involved. Pointing in the same direction was the pyriform growth on the surface. The distinct separation of this from the tumour could not be made out by passing the sound into the uterus, and then

seeing if the tumour and womb moved synchronously; because, owing to the position of the os high up and above reach, the sound could not be introduced correctly within the cavity of the uterus nor its length determined, but here, as was seen at the operation, there was room, even if the sound could have been introduced, for fallacy, as the uterus was six inches long. Later, and before the operation on the 9th of April, the presence of the ascites made the possible distinctness between the uterus and the tumour very probable.

3rd. The operation was imperative. The tumour by its size was producing, not only ascites and anasarca, but right hydrothorax. Dr. Alison, indeed, stated in consultation that he had never seen so much disease compatible with life in another case, and, although he did not anticipate a favorable result, still he acceded to the necessity of an operation as her only chance. Sir W. Fergusson and Dr. Rogers strongly urged it as the only proper course to adopt.

4. During the operation nothing extraordinary occurred, save the long incisions which had to be made to allow of the extraction of the tumour (about twelve inches). The actual cautery was very easily employed upon Baker Brown clamp, and I must confess that, after having seen a very large number of ovariotomy cases, I think the actual cautery is at once the safest and readiest means of separating a pedicle. I think I saw twenty-five cases of successful ovariotomy performed by Baker Brown successively with the actual cautery, and it is remarkable that peritonitis is not a usual symptom observed in cases so treated, and the average recoveries greatest. In referring back to Mr. Spencer Wells' statistics published in vol. lvi of the 'Medico-Chirurgical Transactions,' I have deduced the following table:

	Deaths.	Mortality per cent.
57 cases in which ligature was returned .	28	... 49·12
49 cases where substitute for clamp was used .	16	... 32·65
349 clamp used	69	... 19·77

	Death.	Mortality per cent.
16 cautery alone used	2	... 12·50
14 cautery and ligature	4	... 27·56
28 cautery alone and cautery and ligature .	6	... 21·42

From which I gather, even in Mr. Wells' hands, that the cautery alone is the most successful means of securing a pedicle. I can, however, quite understand that, as a father always prefers his own offspring, and Mr. Wells is the inventor of the best clamp made for the purpose, that he should show a preference for his clamp, particularly as he uses it so well. But as lookers-on can only judge from what they see, or calculate from statistics, I think I may say that the evidence is altogether in favour of the actual cautery.

5th. The hyperpyrexia present and its treatment was a most interesting feature in this case. Her condition on June 23rd was so to say desperate. The temperature had rapidly risen in four hours from 102° to 107°. Her collapsed face, unconsciousness, tremors, muttering delirium, rapid pulse, 144, led me to apprehend a fatal result within a few hours. Yet an ice bath, and this only eight days after operation, brought down the temperature and restored her to life I may say within twenty minutes; and the effect continued for several days. A recurrence of the hyperpyrexia and dangerous symptoms appeared imminent on June 30th, but another bath checked it. The effect was not so marked, but still proved highly beneficial, and continued the next day. No cause except septicæmia, generally so termed, could be ascribed for the first attacks. For the second the incipient intervagino-rectal abscess could be detected. It is worthy of note, however, that the ice bath did not injuriously affect this local inflammation. On the contrary, it seemed to determine its favorable progress for opening on the 4th. This result I have observed in other cases.

6th. The reappearance of the abscess on the 7th was again accompanied by an evolution of heat. But when again opened, although the temperature occasionally rose

it was always under control, and unaccompanied with any head symptoms.

7th. This case exemplifies the necessity of noting vaginal as well as axillary temperature. Perhaps it is not a new fact to note that almost always the temperature is one at least above the axilla in the vagina. But that these may vary sometimes as much as four degrees in favour of the vagina was perhaps not so generally known, and perhaps may be pathognomonic of a local lesion near the vagina. I am satisfied that under sexual excitement or pending a monthly period the vagina may reach a temperature of 103°, the axilla being about normal.

8th. The occurrence of an interrecto-vaginal abscess in this case is not so unusual an event. It occurs not unfrequently, and in measure explains the mode of treatment recommended by Dr. Marion Sims in some ovariotomies. I know of cases in which such abscesses have been overlooked or their puncture been delayed unnecessarily long, and a fatal result followed. Whether these abscesses depend on local peritonitis or the gravitation in Douglas's space of pent-up fluid left in the peritoneum or subsequent oozing of blood is not easy to determine, but their presence is a source of danger, and if fluctuation be detected they should be at once opened. I have elsewhere advised their being opened per rectum and not per vaginam, owing to the fœtid odour of the contents, because this is less obnoxious where the sphincter ani assists as a bar to the escape of the fœtid secretion at awkward hours.

9th. The size of tumour was considerable, and its weight 17½ lbs. This also is considerably above the average, although I am quite aware that one of 75 lbs. was successfully extirpated from a negress in America. Still, in a young lady of 5 feet 2½ inches in stature and of about 9 stone normal weight, the tumour was proportionately large, and would certainly have killed her shortly if not extirpated.

Dr. ROGERS thought great credit was due to Dr. Routh for his successful treatment of the case.

Dr. BARNES thought it was a specimen of a fibroid tumour springing from the uterus. In many cases they retained close union with the uterus. In some they seemed to be of ovarian origin, and not uterine at all.

The PRESIDENT said that Dr. Routh's case was remarkable in more than one aspect, and he trusted that so interesting a communication would not be allowed to pass without full discussion. The points he thought of special practical importance were the success of the treatment when the temperature was high and the symptoms threatening by the ice bath, and the obvious abatement of septicemic symptoms when irritating fluid was tapped from the peritoneal cavity through the rectum.

MALIGNANT TUMOUR OF OMENTUM.

MR. GEO. D. BROWN exhibited a specimen which would be of collateral interest taken in connection with Dr. Routh's.

The patient from whose abdomen the specimen I exhibit was taken after death was a lady aged thirty-six years. The period during which the tumour had been observed was at least two years.

Before she came under my notice, which was in March, 1875, she had been seen by several physicians, most recently by Dr. Heywood Smith, who, as she was residing at Ealing, after seeing her with me placed her under my care.

Opinions had varied as to her case both as to the nature and origin of the disease, which some, I believe, considered to be ovarian; but both Dr. H. Smith and I were inclined to think it malignant, and its probable origin the omentum. As this, however, could not be ascertained with any degree of certainty by external examination, it was arranged that she should be admitted to the Hospital for Women. There, after consultation with his colleagues, Dr. Heywood Smith made an exploratory incision through the anterior wall of the abdomen, and found that the

disease was in appearance malignant and also so extensive and deeply seated as to make its removal a practical impossibility.

After recovering from the operation she returned to Ealing about the 1st of June, and was under my care from then until her death on the 2nd of January.

The tumour continued to increase in size, and the pain caused by it was at times very distressing. The only medical treatment was morphia morning and evening hypodermically, which appeared to give her great relief. There was very rarely any sickness.

Dr. Skelly kindly made the post-mortem examination. On opening the abdomen the large mass of the tumour appeared to occupy the whole space, it did not completely fill the pelvis. The small intestines, the ascending and transverse colon, were behind it. The lower part of the descending colon and sigmoid flexure passed over its lower part in front. The tumour adhered partly to the abdominal walls, more firmly near the seat of incision. It was firmly adherent to the peritoneum at the back, but had no other attachment and shelled out without cutting. The appearance was nodulated and brain-like in colour. Weight 17 lbs. 10 oz.; larger circumference 24 inches; smaller circumference 14 inches.

The liver was small and pressed upwards. It had no nodules of adventitious growth. The uterus and ovaries were normal, and there was no disease of any other organ. I have not yet had time to examine the tumour microscopically.

Dr. BARNES referred to a similar case he had brought before the Society last year. A mass weighing twenty-eight pounds had been removed under the supposition of its being ovarian.

Dr. HEYWOOD SMITH had seen the case when the tumour was still small. He had advised an exploratory incision to see if it could be removed. He could find no attachment or adhesion.

ANNUAL MEETING.

At 9 o'clock the scrutineers retired, and on their return the President declared the following gentlemen elected as Officers and Council for the ensuing year :

Honorary President.—Farre, Arthur, M.D., F.R.S.

President.—Priestley, William Overend, M.D.

Vice-Presidents.—Cleveland, William Frederick, M.D.; Grimsdale, Thomas F. (Liverpool); Meadows, Alfred, M.D.; Newman, William, M.D. (Stamford); Routh, Charles H. F., M.D.; Squire, William, M.D.

Treasurer.—Murray, Gustavus C. P., M.D.

Honorary Secretaries.—Wiltshire, Alfred, M.D.; Edis, Arthur W., M.D.

Honorary Librarian.—Aveling, James H., M.D.

Honorary Members of Council.—Oldham, Henry, M.D.; Barnes, Robert, M.D.; Davis, John Hall, M.D.; Hewitt, Graily, M.D.; Hicks, John Braxton, M.D., F.R.S.; Tilt, Edward John, M.D.

Other Members of Council.—Bantock, George Granville, M.D.; Bassett, John, M.D. (Birmingham); Butt, William Frederick, L.R.C.P.; Chambers, Thomas, M.R.C.P. Ed.; Galabin, Alfred Lewis, M.A., M.D.; Galton, John H., M.D.; Godson, Clement, M.D.; Grigg, William Chapman, M.D.; Hayes, Thomas Crawford, M.B.; Potter, John Baptiste, M.D.; Price, Wm. Nicholson, M.R.C.S. (Leeds); Roper, George, M.D.; Rose, Henry Cooper, M.D.; Steele, Arthur B., L.K.Q.P.C.I. (Liverpool); Taylor, Thomas, F.R.C.S. (Birmingham); Thorburn, John, M.D. (Manchester); Williams, John, M.D.; Worship, J. Lucas (Sevenoaks).

The following report of the Auditors for the year 1875 was then read, and on the motion of Dr. Tilt, seconded by Dr. Playfair, unanimously adopted.

BALANCE-SHEET OF THE OBSTETRICAL SOCIETY OF LONDON.

(Abstract of the Receipts and Expenditure for the year ending December 31st, 1875.)

1875.			£	s.	d.
Jan.—To balance in hand from balance-sheet for 1874			161	10	2
(1). Subscriptions received during 1875: 578 at £1 1s.			606	18	0
(2). Composition Fees					
(3). Midwifery Examination Fees			2	7	0
(4). Sale of Transactions, &c.			72	8	11
(5). Interest on 3 per cent. consols, £1381 5s. 9d.			41	1	10
Amount of stock, 3 per cent. consols, standing in the names of the Trustees:					
January, 1875	£1381	5 9			
Purchased November, 1875	105	5 3			
	£1486	11 0			
			£884	5	11

By			£	s.	d.
(1). Transactions: Printing, Lithography, Paper, and Binding, making Index, &c., and delivery of Transactions			277	16	1
(2). Library and Museum: Library—Purchase of Books and Binding	£52	14 0			
Rent, Salary, and Petty Expenditure	238	11 0			
			291	5	0
(3). General Expenses: Meeting-room, Expenses of Meetings, Stationery, Collection of Subscriptions, Postages, &c.			110	13	0
(4). Purchase of Consols, £105 5s. 3d.			100	0	0
Balance carried down in hand			104	11	10
			£884	5	11

The following report of the Honorary Librarian for the year 1875 was then read, and unanimously adopted on the motion of Dr. Savage, seconded by Dr. Langmore.

Report of the Honorary Librarian for 1875.

MR. PRESIDENT and GENTLEMEN,—The increased usefulness of your Library is evidenced by the fact that seventy more volumes have been taken out during the past year than were issued the year previous. This ratio will doubtless be considerably augmented during the present year in consequence of the ease of reference to our valuable collection of books which the Fellows will soon enjoy. The Catalogue of the Library and Museum is now printed and will be bound up with the forthcoming volume of the 'Transactions.' It has been very carefully edited by Mr. Watson, the Sub-Librarian; and I have much pleasure in taking this opportunity of testifying to the punctuality, courtesy, and ability with which he fulfils his duties.

The additions to our Library during the past year amount to 103 volumes. If there had been space the Museum would also have been enriched by Dr. Arthur Farre's promised collection of casts.

The question of increased accommodation is a pressing one. Next March twelvemonth the lease of our present rooms will be out, and after that date, at the present rate of increase in the number of new books, fresh space will be demanded. This difficulty has been laid before your Council and is receiving their serious consideration.

J. H. AVELING, M.D.,

Honorary Librarian.

A vote of thanks to the retiring officers and Members

of Council was then moved by Mr. Dunn, and seconded by Dr. Cumberbatch, and carried unanimously.

The PRESIDENT then delivered the Annual Address.

ANNUAL ADDRESS.

GENTLEMEN,—At the commencement of another year it is usual for your President to take a brief retrospect of the past, to review the work of the session, and report on the general condition of the Society. During the past session the Society has again done excellent work, and several papers of unusual interest, with the discussions upon them, will appear in the forthcoming volume of 'Transactions.' The event of the session has been the discussion on puerperal fever; and the Society is greatly indebted to Mr. Spencer Wells for taking the initiative in the debate, and for the able manner in which he drew up and illustrated certain propositions, in the form of interrogatories, to elicit the opinions of Fellows. The discussion, indeed, not only proved attractive to large audiences who assembled in this room on each successive evening, but the subject had so profound an interest for medical practitioners everywhere, that the published debates were read with eagerness throughout Great Britain, Ireland, and other countries where obstetric medicine is cultivated. During the progress of the debate, the Society had the advantage of hearing the matured opinions of many of its Fellows resident in London and the provinces, some of them being professors and teachers of world-wide reputation. We were honoured by the presence of the Professor of Midwifery from one of the Scottish Universities, and one celebrated professor crossed the

Atlantic to state his views, and combat prevailing ideas which he believed to be erroneous. The Society should also acknowledge its indebtedness to the distinguished surgeons and physiologists who so ably sustained the debate in some of its collateral aspects.

The Society may well be congratulated on the wide-spread interest attached to its proceedings this session; and among the other benefits accruing, not the least is the fact, that the discussion on puerperal fever attracted for the first time to these rooms two of our honorary resident Fellows, Dr. Arthur Farre and Dr. West. It is well known that both these gentlemen are authorities of the highest order in the department of Obstetric Medicine, and their contributions to the debate will henceforth enrich the archives of the Society. And surely a topic of such commanding interest and gravity as puerperal fever, or by what other term it may be proposed to call it, well deserves careful investigation. It is a study which may worthily occupy the keenest and best intellects. The acute forms of illness which occur after delivery, and often end fatally, are especially cruel affections; attacking women, as they commonly do, during the very flower of their age, just at the dawn of fresh hopes, and at the time of their greatest usefulness in life. The anxiety of mind caused to the medical man when such cases occur in his practice, and the damage which, rightly or wrongly, results to his professional reputation, can only be appreciated by those who have had the painful experience. The mental anguish so engendered is reported, indeed, sometimes to have culminated in mental aberration.

Dr. Farr, of the Registrar-General's office, estimates the mortality after childbirth in this country as 1 in 190 women delivered; but Dr. J. Matthews Duncan, in his address at Norwich, in 1874, regards this as much too low a rate, and after careful computation, states the mortality, within four weeks after delivery, to be 1 in 120; while, if the time be extended beyond four weeks, he believes that the number of puerperal deaths reaches as

high as 1 in 100. This last calculation is so appalling, that we may fain hope it is in some way exaggerated; but, taking the lowest estimate, 1 in 190, we find ample scope for grave reflection, and more especially as a large proportion of the deaths so computed arise from puerperal fever, or the group of post-partum diseases which have been somewhat vaguely designated by the name of "puerperal fever." Moreover, the number of ascertained deaths does not express all the mischief done. Many of those who survive the attack are greatly hindered in recovery, are exposed to much suffering, and possibly remain permanently enfeebled or maimed for life. If reason were required, therefore, for the interest manifested in the late discussion, it is sufficiently forthcoming in the above statistics, and more especially as in and out of the profession there is a growing impression that these deaths are in a great measure preventable.

Disappointment has been expressed by some critics that after so protracted a discussion, in which so many eminent men have taken part, no more definite conclusions should have been arrived at, no more practical results obtained. It was inevitable in a discussion on such a subject that the most diverse opinions should be expressed; but, with all due submission, I venture to take exception to such criticism, and I trust I may be able to show that some advances have been made towards a more precise knowledge of the subject. The debate has obviously enabled us to take stock of our knowledge, and, in doing this, it is evident that certain ideas, hitherto fragmentary and vague, concerning the nature and origin of puerperal fever, have assumed a more concrete form than heretofore. The progress of pathological science has in this, as in other departments, been gradually producing certain definite conclusions and results, which become more and more apparent as time goes on, but hitherto have scarcely been fully appreciated.

Had time permitted, your president might, at the close of the debate, have rendered a service to the Society by

presenting a summary of the various arguments used in treating the several propositions laid down by Mr. Spencer Wells. As the occasion did not present itself then, I propose to occupy your time this evening in an endeavour to take up the threads of the discussion, and trace out what may be the general conclusions or practical results arising from it. The task of summing up, however, is by no means an easy one. In view of the many conflicting opinions which have been expressed on some of the points considered, it has seemed like an attempt to educe order out of chaos; and I trust the Fellows who have spoken will pardon me if in the remarks I have to make, I in any sense misinterpret their meaning, and if I adopt certain views in preference to others.

In attempting to summarise the debate, I shall venture to make such commentaries as have occurred to me; and, without necessarily adhering to the form or order of the questions proposed by Mr. Wells, I shall pass in review the various points he has raised.

1. *Definition.*—As to definition: what is it that we mean when we speak of "puerperal fever and its relations to the infective diseases and pyæmia?" On this question of definition we had the assistance and heard the opinion of so high an authority as Dr. Arthur Farre, who has defined puerperal fever to be "a continued fever, communicable by contagion occurring in women after childbirth, and often associated with extensive local lesions, especially of the uterine system." Dr. Farre, however, has informed us that this definition is only for the purpose of identification, and does not pretend to explain the phenomena of the disease, or to indicate its nature. As an illustration of the extreme difference of opinion expressed in this discussion, I may point out that, even on this preliminary question of identification, Dr. Snow Beck contends that the definition, as published in the Nomenclature of the Royal College of Physicians, cannot be maintained in practice; while, on the other hand, Dr. Fordyce Barker thinks the definition "absolutely perfect." It is obvious

that the definition would include all the forms of infective continued fevers which may attack the lying-in woman, whether they are peculiar to the puerperal state or not; and in this sense it may be faulty, but it is not easy to define what is almost protean in character, and exhibits itself in such varying forms. The definition may well answer the purpose, if only it be borne in mind that in this sense puerperal fever is a comprehensive term, including a diversity of puerperal febrile affections, and that it does not express any theory or doctrine as to their pathological nature. In this respect it differs essentially from the definition of typhus or typhoid fever, and other zymotic diseases, which have characteristic symptoms, well-defined pathological appearances, and are believed to be always produced by the same specific poison.

2. *Is Puerperal Fever a Specific Disease?*—Had I been asked no long time ago if I believed in the existence of a perilous and often fatal form of fever peculiar to the puerperal condition, I should unhesitatingly have replied in the affirmative. Nevertheless, the several speakers who have addressed themselves to this question have with a surprising unanimity denied the existence of a specific puerperal fever, and expressed their conviction that the so-called puerperal fevers are diseases recognised as occurring in other than puerperal patients, but modified and rendered more formidable by the local and systematic peculiarities associated with parturition. Professor Leishman, of Glasgow, indeed, who had taught and written concerning a specific puerperal fever, made a formal recantation of his former views on this subject, and, with certain reservations, stated his belief that a large proportion of so-called puerperal fever has its origin in pyæmic or septicæmic infection. The only notable dissentient from this view is our distinguished honorary Fellow, Dr. Fordyce Barker, of New York, who, in a very able speech, asserted the doctrine of a distinct and specific puerperal fever. Dr. Barker's defence of his position was supported by a variety of arguments that were at once ingenious and forcible,

and it may fairly be presumed he has put before us the most weighty reasons which can be urged on that side of the question. The fact remains, nevertheless, that clinical investigation and pathological research have both in recent times been pointing in an opposite direction, and teaching that what has hitherto been called puerperal fever or fevers are but forms of blood-poisoning or septicæmia similar to those observed in other than puerperal patients, having, perhaps, a diversity of origin, and intensified and modified, it may be, by the peculiarities of the puerperal state, but still essentially the same, and not constituting a pathological genus apart. While the discussion was pending, I took occasion to read the article on Surgical Pyæmia in Holmes's 'System of Surgery,' written by Mr. Callender, the able surgeon who was good enough to come here and tell us something of the surgical aspects of septicæmia; and I confess I was struck not only by the identity of symptoms between puerperal fever patients and surgical patients affected by pyæmia, but also by the corresponding varieties in each case, whether we look to the origin, severity, or pathological results.

In employing the term "pyæmia," Mr. Callender guards himself against being supposed to imply that pus is the active poison producing the symptoms described. Modern pathology teaches that the blood may be poisoned by other ingredients than purulent matter; and those of you who were present on the first night of the debate listened to a lucid exposition on this subject by Mr. Hutchinson, in which he expressed his belief that pyæmia, or pus in the blood, was due to inflammation of the patient's own veins, and to suppuration in their interior. Septicæmia he defined as blood-poisoning induced by inflammation of the patient's own tissues other than the veins, whether that inflammation arose spontaneously, or was caused by an irritant from without. It is now clearly established that septicæmia, pyæmia, and phlebitis are distinct pathological conditions, although all may be coincident in the same patient.

Formerly, two opinions were held concerning the

pathological nature of puerperal fever. Puzos, Levret, Hamilton, and White regarded it as an idiopathic putrid fever. Armstrong, Mackintosh, and Campbell maintained that it was essentially a local inflammation, of which the fever-symptoms were merely a sympathetic consequence. Boyer, Le Gallois, and Cruveilhier endeavoured to show the analogy between the condition of a woman recently delivered and any other patient who was the subject of surgical injury, and to point out the similarity of the morbid affections to which both were liable. Cruveilhier, indeed, compared the uterus after delivery to an amputated stump, inasmuch as its muscular walls were laid bare, and at the placental spot were the gaping orifices of divided vessels. Subsequent research has proved that the uterine walls are not so absolutely denuded as M. Cruveilhier supposed; but there is no doubt as to the presence of large open channels at the placental spot, through which deleterious matters may gain a ready access to the general circulation. Following out this idea, Sir J. Y. Simpson in 1850 wrote a memoir on the analogy between puerperal and what he called surgical fever—a term much objected to by some surgeons.

Probably the best essay on puerperal fever which has appeared during the present generation is that by the late Dr. Robert Ferguson, one of my predecessors in the chair of Midwifery at King's College. Dr. Ferguson attributed puerperal fever to a vitiated state of the fluids of the body, and regarded all varieties of local lesion as consecutive to vitiated circulation. He pointed out, what is now generally conceded, that none of the local lesions are constant, and so "none can be assumed as the essence of the malady; and, as all may exist, they may each and all be regarded as the results of a cause capable of producing them singly or conjointly." Whether, therefore, the fever takes the form of the "peritoneal," the "gastro-enteric," the "nervous," or the "complicated," where several organs or tissues are attacked at once, a poison in the blood is the one source and cause. So generally accepted

is this doctrine advanced by Dr. Ferguson, that Dr. West was in some sort justified in saying, "We have not advanced far, if at all, beyond the conclusions which Dr. Ferguson laid down." In another sense, Dr. West's assertion stops short of expressing the whole truth of the case; for if we have as yet found no better explanation of the phenomena observed in connection with puerperal fever than "a vitiated state of the fluids," nevertheless a whole army of ardent workers have been investigating and adding to our knowledge concerning the nature of the poison which produces such fearful results, the various ways in which it finds its entrance into the blood, and the best methods of obviating its effects. A further impetus has been given to our knowledge of the subject by Virchow, who, after repeating the experiments on purulent infection recorded by Gaspard in 1809, and adopting the term "septicæmia" from Piorry as appropriate for forms of blood-vitiation other than by pus, published his researches on thrombosis and embolism. Among obstetricians, the names of Spiegelberg, Schroeder, D'Espine, Barnes, Matthews Duncan, and others, are well known as writers on this subject, who have all contributed something to its further elucidation.

As to the way in which the poison finds its entrance into the systematic circulation, Dr. Ferguson did not overlook the peculiar condition of the interior of the uterus at the placental spot, as affording a ready mode of ingress for what might be deleterious; and he held that all wounds and bruises in the genital canal might create diseased secretions from a traumatic surface, and by absorption give rise to the phenomena of puerperal fever.

Taking, then, the outcome of the discussion in this Society, and the evidence from other sources, it may be stated that puerperal fever, or fevers which are attended by high temperature, and are commonly associated with extensive local lesions, are due to the inception of a morbid poison which vitiates the blood, and which produces a great variety of symptoms in accordance with the nature

and intensity of the virus, the amount of the dose absorbed, the state of the patient when attacked, and a diversity of other conditions, which have been alluded to more or less fully by the various speakers.

As to the origin of the poison, whatever may be its nature or chemical composition, Dr. Barnes states that it has two sources: in the one case, the virus is formed in the patient's own body as the result of initial morbid changes in some special part which infects eventually the rest of the system; in the other case, the virus is imported into the body of the patient by contamination from without. To the one class of cases he applies the term "autogenetic," to the other "heterogenetic"—synonyms which correspond to the appellations "auto-infection" and "hetero-infection" of Schroeder.

In the autogenetic or auto-infective form, septic matter is spontaneously formed within the system of the patient, as the result of disorganization and death of tissues by a process which Virchow has termed necrobiosis. Thus, the retention of a portion of placenta, or of membranes, or of blood-clots, may become a source of septic poisoning; or a contusion or laceration of the cervix, vagina, or perinæum, may become the seat of unhealthy action, and organic substances in process of decomposition are formed, which, on being absorbed, vitiate the blood. That fluids do pass from the uterine cavity into the uterine sinuses is abundantly proved; and Dr. Snow Beck has stated, as further evidence on this point, that, after the uterus has been injected by the perchloride of iron to arrest post-partum hæmorrhage, the uterine sinuses have been found gorged with grumous fluid containing an abundance of iron. Dr. Savage, who has paid particular attention to the anatomy of the uterus, is inclined to doubt if poison is absorbed by its veins, and thinks the absorbents are the chief agents in this process. Dr. Tilt I understood to hold a like opinion. Dr. Graily Hewitt, Dr. Snow Beck, and others, have enlarged on the great facility afforded to the absorption of septic fluids by an undue relaxation of the

uterine walls after delivery, and hence deduce the great importance of thoroughly promoting its contraction upon the expulsion of the placenta. Dr. Hewitt goes so far as to say that he has never seen a case of puerperal pyæmia in which this relaxed condition of the uterus was absent. Dr. Beck attributes the influence which has usually been ascribed to hæmorrhage as a predisposing cause of septicæmia, entirely to relaxation of the uterus as the prime factor; but this, I take it, is a somewhat too exclusive statement, as Magendie clearly proved that, with empty vessels, absorption is very rapid in other parts of the body, as well as the uterus. Dr. Tilt attaches great importance to fetid lochia, and their absorption, as factors in producing the febrile affections of the puerperal state. He believes they are not only more frequent than commonly supposed in ordinary cases, but that scarlatina, or other zymotic disease in a puerperal woman, may cause the lochia to become putrescent and virulent: their absorption then adds a fresh peril to the case, and accounts for the serious character of the complication. And if absorption of decomposing or putrescent materials formed in the patient's own body is to be feared when there is no breach of continuity other than that caused by the separation of the placenta, how much greater may become the danger when any laceration has taken place in the genital canal, which exposes a wounded surface to external agencies! Mr. Callender has reminded us of a truth formerly indicated by Benjamin Gooch, of Norwich, that there is nothing more irritating or acrid than the fluid of a wound itself immediately after operation, and if this be pent up, it may become a source of auto-infection. Mr. Spencer Wells has become thoroughly conversant with this fact in practising ovariotomy, and he drains off from the cavity of the peritoneum the acrid fluid which would otherwise inevitably poison his patient. But Mr. Callender has further informed us that in surgical practice "a patient may be tolerant enough of decomposition which may be set up by a wound in his own body, but will be intolerant

of poison conveyed to him or her from any other wound." If this be true in surgery, *à fortiori* it is true in obstetrics, and demonstrates how essential it is to the safety of his patient that the accoucheur should keep his fingers free from all contamination.

Turning to the heterogenetic or hetero-infective forms, in which the virus is imported from without, the inquiry suggests itself, Whence is derived the poison which, introduced into the system, has such potent results? Is it always one and the same, or are there several poisons capable of producing different diseases in non-puerperal patients, but provoking generically the same results when introduced into the body of a woman recently delivered? It is this part of our problem which seems to me most difficult to solve; and yet upon a correct solution of it probably depends the reconciliation of many conflicting views, and certainly the adoption of proper prophylactic measures for preventing the spread of puerperal fever. And this brings me to Mr. Wells's second interrogatory, which deals with—

3. *The Relation of Puerperal Fever to Zymotic Disease.* —Concerning the special *rôle* which the poison of scarlet fever plays in the production of puerperal fever, we have had most valuable evidence brought out by this discussion; and although there has been some conflict of opinion, there are certain practical deductions which are very apparent. In the first place, we have had the evidence of two or three men engaged in large general practice, who have attended labours side by side with cases of scarlet fever, and who are able to tell us from personal experience that a woman recently delivered may go safely through scarlet fever, with the disease so little modified as to retain its distinctive characters, and to be recognisable. Dr. Squire, Dr. Brunton, and Dr. Brown afford conclusive testimony on this point; and Dr. Squire goes so far as to assert that "puerperal fever is not typhus, typhoid, smallpox, measles, diphtheria, nor even scarlatina." The testimony of Dr. Savage and Dr. Wynn Williams is to the same purpose, at

least so far as scarlatina is concerned. Cases have been occasionally recorded like that of Dr. Cordes, of Geneva, and Dr. Jackson, of Notting Hill, where scarlet fever passed through the system of the mother, who was herself protected by a previous attack, and infected her child *in utero*, without serious consequences to the mother. Further, Hirsch and Veit have endeavoured to show by statistics that scarlet fever and puerperal fever are not the same diseases, because there is no coincidence between the prevalence of the two ailments at the same time. On the other hand, are high authorities—Dr. Arthur Farre, Dr. Barnes, Dr. Braxton Hicks—not controverting the statement that a puerperal woman may sometimes safely go through scarlet fever with all its distinctive characters; but asserting besides that scarlatina poison is specially perilous when engrafted on the puerperal state; and that, on account of the constitutional peculiarities after delivery, it is prone to produce what has been called puerperal fever, or a form of scarlet fever so wanting in its usual characters as to be unrecognisable. Dr. Braxton Hicks's paper in the twelfth volume of the 'Obstetrical Transactions' is a remarkable exposition on this part of the subject, and furnishes a new starting point. And, in truth, there is nothing very unphilosophical in consenting to both these positions. A small dose of the poison in a perfectly healthy woman after delivery may run through its ordinary course, and be eliminated; while a larger dose, or one from a more virulent source, imported into the blood of a less healthy woman, may produce a more malignant type of disease, not having its ordinary manifestations, just as some of the worst cases in an epidemic of cholera are not attended by the usual symptoms of vomiting and purging.

There is, however, a fallacy in reference to the occurrence of scarlatina in the puerperal patient which must not be overlooked. As stated by Dr. de Gorrequer Griffith and others, there may be a rash closely resembling the scarlet

fever eruption which is due to toxemic poisoning of another kind, and which may be mistaken for scarlatina.

I recollect that it was a current opinion among the medical men in a crowded manufacturing town where I first studied medicine, that scarlatina communicated to a lying-in woman was almost certain death; and I was early impressed with the danger of these cases by knowing a medical man who was believed to have carried scarlet fever to the ladies of three country families, and so caused their death. I have since learned that scarlet fever is not so universally fatal as I then supposed; and the history of Queen Charlotte's Lying-in Hospital, which has been kindly furnished to me by Dr. Blakeley Brown, conclusively proves this. From 1857 to 1871, there were twenty-six cases of scarlet fever in the hospital. Of these, two were removed to St. George's, and the results are not stated. Of the remaining twenty-four, six died—a fourth of the entire number attacked. I still, therefore, cherish a wholesome horror of scarlatina in the lying-in room.

There can be no doubt that lying-in women are prone to be affected by any febrile disease to which they may be exposed. It matters not whether it be scarlet fever, measles, smallpox, or other zymotic disease; unless they be protected by a previous attack, the affection is apt to break out with more than ordinary severity, with graver complications, and frequently tends to a fatal termination. During pregnancy, the accession of one of the exanthemata will often bring on abortion or premature labour, showing the profound impression made on the system. Dr. Barnes even has suggested that the protection afforded by a previous attack of scarlet fever breaks down under the trial of childbirth. And it is to be remarked that, because certain patients have escaped easily, or, it may be, on one or more occasions it has visited a series of patients lightly, these examples do not vitiate the rule. There is obvious danger in dogmatising on questions concerning which we are but imperfectly informed as yet, and in arguing only from negative results.

By taking too exclusive a view in the case before us, we may fall into pathological error, or what is worse, neglect precautions necessary for the safety of our patients.

If the evidence be true in reference to the exanthemata, it is even more forcible, and borne out by a greater concurrence of opinion concerning the serious peril encountered by the puerperal woman when exposed to the poisons of erysipelas, diphtheria, and typhus. Mr. Wells and others have mentioned instances in which there could be no doubt that puerperal fever was produced by direct or indirect communication with erysipelas; and other Fellows had painful experiences to relate, had time permitted, of puerperal deaths caused unwittingly by going from patients having erysipelas to the lying-in room. The connection between the two has long been noticed; and observations have accumulated with such force and frequency as to constitute absolute proof of close affinity. Many new-born children have died of erysipelas whose mothers were the subjects of puerperal fever; and instances have not been rare where the medical man attending a puerperal fever patient has from her contracted erysipelas, and died also.

My friend, Dr. Fordyce Barker, who contends strenuously for the specific character of puerperal fever, admits in his larger work, and also in his recently published lecture, that the close relation, or what he calls the "solidarity," between puerperal fever and erysipelas is conclusively settled. He considers, however, that, although they are interchangeable, they are distinct diseases. I fear that logically this acknowledgment of interchange of symptoms is somewhat adverse to the theory that identity of cause will necessarily produce identity of result. In recognition of the same mutual relation, Virchow speaks of puerperal fever as *malignant puerperal erysipelas*.

A connection has also been remarked between puerperal fever and diphtheria. The late Professor Martin, of Berlin, probably erroneously, came to regard the diphtheritic process in the genital organs of lying-in women

as the only essential element of puerperal fever. That there may be a connection at times seems certain. Dr. Playfair has brought forward some evidence on this point; and Dr. Fordyce Barker, Dr. Lusk, and others in America, have described the diphtheritic process as occurring in certain puerperal fever epidemics in the hospitals there.

In reference to typhus fever, again, there is evidence that, if communicated to a woman after delivery, it may produce a virulent and fatal form of so-called puerperal fever. Among the examples are those mentioned by Dr. West and Dr. Beck. In one instance, after the introduction of a case of typhus fever into the Dublin Lying-in Hospital, "puerperal fever appeared in forty-eight hours afterwards, although the hospital had been free from it for a year before." Sir Henry Marsh, indeed, from seeing the frequent relation between the typhus and epidemic puerperal fever, remarked that "the true character of epidemic puerperal fever seems to be typhus."

The proclivity to be affected by prevailing febrile diseases, or to initiate them, is no doubt due to the peculiar constitution of the pregnant and puerperal woman described at length by Dr. Richardson and Dr. Arthur Farre. The excess of fibrine in the blood, and the diminution of the salts, exist even before parturition. Afterwards, the sudden arrest of the utero-placental circulation, and the consequent effect on the maternal blood-current, with the later initiation of the milk process, and the involution of the uterus, furnish, as it were, so much combustible material. All constitute so many disturbing forces, which, added to the susceptibility of the nervous system, must render even the healthy woman sensitive to febrile disturbance, and favour the development of rapid changes in the composition of the blood, if only a small leaven of ferment in any form be added to it. Moreover, from the present artificial habits of society, few parturient women are so healthy as they might be, and, consequently, they become a more ready prey to disease.

A series of predisposing causes common to other diseases

as well as to puerperal fever has been enumerated. Dr. Newman, of Stamford, has particularly drawn attention to the baneful effects of sewage-air and depressing mental conditions. All these may so lower vitality that even the occurrence of a chill may develop febrile conditions. The greater proclivity of unmarried women to puerperal fever has been remarked by Campbell, Home, Leake, John Clarke, and others; and there are some striking illustrations of the effects of mental influences in provoking the disease given by Professor Lusk in the 'American Medical Journal' last November.

There seems to be literal truth in the remark made by Dr. West, that "there is not one single solitary cause to which we can refer the symptoms of puerperal fever; that it occurs now from one cause, now from another." With equal truth, also, it may probably be asserted that there is not one puerperal fever, but several, arising from a diversity of causes. The term puerperal fever has been somewhat loosely but habitually applied to all diseases of lying-in women which are attended by febrile symptoms and tend to a fatal termination. In attempting a more accurate pathology, it is well to bear in mind that fever is only a symptom of disease; and that we have to find out what is the underlying disease, of which the fever is but the indication. Perhaps the best practical classification of puerperal fevers which has been suggested, in accordance with our present knowledge, is: 1. The ephemeral forms which depend on some transient cause; and the graver class, divided into (2) the auto-genetic or auto-infective form, and (3) the hetero-genetic or hetero-infective, in which the poison is imported from a zymotic or other infective source, and the origin of which can be traced. Nothwithstanding this classification, there will always be cases the origin of which it is difficult or almost impossible to detect. These must necessarily form a class by themselves, until further knowledge enables us to assign to them their proper place.

4. *Epidemic and endemic characters of puerperal fever.*

—A warm discussion has taken place as to whether puerperal fever is ever really epidemic; that is, dependent on general atmospheric or other influences which pervade a community, as distinctive from the miasms of unhealthy hospitals or the propagation of the disease from one patient to another by inoculation. Dr. Matthews Duncan is inclined to doubt the evidence of its epidemic character altogether, and to regard it as essentially endemic. There is no doubt, as he suggests, that the word "epidemic," as applied to an outbreak of puerperal fever, has been at times used by authors carelessly, and that "endemic" would have been the more appropriate term; but the annals of medicine still afford undoubted evidence of the epidemic character of puerperal fever at definite epochs, and, if we turn to the histories by Hirsch, by Dr. Robert Ferguson, and others, besides the speech of Dr. Fordyce Barker in this Society, we shall find that it occurred extensively in certain years among all classes of the community, in hospital and out of it, in town and country. In 1821, for example, it occurred as an epidemic in France, in Holland, in Scotland, and in London at the same time; while, further, it has been noticed that, when puerperal fever prevails epidemically in the human subject, the lower animals die in large numbers of diseases connected with parturition. I confess I cannot see what is gained in argument by those who contend that puerperal fever is essentially a form of pyæmia (using the term pyæmia with the latitude they attach to it), by denying that puerperal fever is at times epidemic, unless it be desired to prove that the disease always originates in some local inflammation of the generative organs, and that the febrile symptoms are only the natural effect of the intense constitutional effect so engendered. This theory of the localists, as it has been called, was supported by Professor Meigs, Professor Pajot, and others, but has received little countenance in this country. Erysipelas is so undoubtedly and frequently epidemic in its character, has so commonly a spontaneous or idiopathic origin, apart from its associa-

tion with traumatic injuries, that, if the mutual interchange between puerperal fever and erysipelas be admitted, the epidemic character of both follows as a matter of course.

The influence of a vitiated atmosphere in overcrowded hospitals in producing an endemic form of the disease is only too well confirmed. Whenever a number of lying-in women are aggregated together, there is danger that a miasm may be generated which will develop puerperal fever, and it is by no means easy to define the amount of ventilation and isolation which are necessary to prevent these untoward consequences. Hence a feeling has been gradually growing up that, notwithstanding the economic and educational advantages of lying-in hospitals, poor women are more safely confined at their own homes. In the recent congress on maternity hospitals at Brussels, M. Lefort stated that, in Paris outside the hospitals, the mortality has been one in 212, while in the Maternity Hospital it had been one in 29. Fortunately, the statistics of maternity hospitals in this country are not so unfavourable, but the mortality in them even is much greater than when patients are delivered at their own homes. At King's College Hospital we had a notable instance of the very serious results provoked in puerperal women by their being confined under the same roof with patients in general medical and surgical wards. The mortality in the lying-in wards gradually increased year by year, until at length it reached the fearful maximum of nearly one in every thirteen women delivered, and then it was determined to close the midwifery department altogether.

5. *Contagiousness of puerperal fever.*—Turning to Mr. Wells' fourth interrogatory, which bears upon the contagious or infectious character of puerperal fever, I find there is no question among the various speakers that the disease may be propagated from one patient to another, although there may be some difference of opinion as to the way or means by which it is communicated, and some

forms are regarded as less likely to be infectious than others. For a long time, the contagiousness of puerperal fever was disputed, and in Paris writers and practitioners remained unconvinced of its contagiousness long after it had been conceded elsewhere. In our day, the direct proofs of its contagious quality have accumulated to such an extent, that to disregard them in practice would amount, on the part of a medical practitioner, to a plain dereliction of duty. So far as some of the forms are concerned, however the attack may have originated, if it be but a single case, it may become the focus and centre of propagation to other women. And, of the several ways in which the subtle poison may be conveyed to the lying-in woman, none is more certainly proved than that it may be conveyed by the hands of the practitioner in making vaginal examinations. But this is not the only way. It may probably be communicated through the clothes, instruments, respiration, or even the secretions of the medical practitioner, midwife, or nurse. That it may be so spread we have ample evidence, if we look back to the records of Gordon, Armstrong, Gooch, Ramsbotham, and others. Dr. Roberton, of Manchester, gives one of the strongest instances possible. In the space of one calendar month, a midwife attended twenty cases belonging to a lying-in charity; of these, sixteen died of puerperal fever. Other midwives of the same charity attended 380 cases in the same district and at the same time, and none of these were affected by the disease.

For further evidence on this subject, I may refer to the works of Dr. Tyler Smith, Barnes, Routh, and Semmelweiss; and I can particularly recommend the perusal of the book published by Professor Wendell Holmes, one of the most charming and original of writers on general as well as on medical subjects.

There is very cogent collateral evidence towards proof that the blood of a puerperal patient may be infected by other channels than by the genital canal. It is certain that puerperal fever may begin in a patient before her

delivery. Dr. Barnes's statement that he has been conscious of absorbing poisonous and offensive emanations from patients with putrid discharges, and that he has suffered from shivering, diarrhœa, and foul breath as the result, affords a very strong presumption that an attendant may go about charged with an infectious disease, and convey an atmosphere about him which shall be most deleterious to susceptible patients. There is a very ingenious exposition in reference to this matter in Dr. Tyler Smith's 'Manual on Obstetrics,' and he strengthens the position by reference to cases in which pregnant women who have had smallpox in childhood, and are proof against infection, have nevertheless, as in Dr. Cordes's case previously mentioned, on being exposed to the poison, conveyed the disease to the fœtus *in utero*.

My friend, Dr. Moir, a former President of the College of Physicians in Edinburgh, has sent me the following short history, which seems to indicate that a diseased child *in utero* may infect the mother with a form of pyæmia which may be transmitted on to other lying-in women. I quote his own words:—

"Mrs. H—, who had had several previous very easy confinements, had threatenings of labour on a Monday. Instead of a rapid delivery, as usual, she had slight pains and much *malaise* all the week, and was confined latish on the Saturday evening. Child above the average in size, about 9 lbs., fat, and healthy-looking. On Sunday forenoon, the child died very unexpectedly and without apparent cause. On examination next day, it was found that one pleural cavity was filled with thick purulent matter, the lung being forced back and, of course, undistended with air. The mother never had milk, as usual, fevered, with much general pain, and afterwards had all the symptoms of puerperal fever. Large abscesses formed in various parts of the body, some being opened, which gave partial relief. They were on the legs, arms, chest, and a very large one implicating almost the whole

dorsal muscle. This one was not opened. The pyæmia in this case, from the symptoms, and from the child's being affected, was evidently existing before delivery. So much for Mrs. H—.

"Two hours after her child was born, I was called to Mrs. W—, who had had several children—easy cases. She was ill only two hours; took rigors on the third day, and died about six days after delivery, with all the symptoms of puerperal fever. Two hours after Mrs. W— was confined, I was called to Mrs. F—, who also had an easy delivery; had all the symptoms of puerperal fever; but recovered after a hair-breadth escape, not recovering for six months. Observe: the three cases were all over within eight hours. I undoubtedly carried the infection from Mrs. H—, whom I had been seeing constantly during the six days she was ailing. She survived the delivery about twelve days, Mrs. W— only about six."

But are all forms of puerperal disease attended by febrile disturbance equally infectious? This is an inquiry which bears with moment on the necessity for precautions on the part both of doctors and of nurses, and the question is constantly being raised, Should a nurse who has been attending this or that modification of the disease be permitted to pass on at once to the charge of some other expectant patient? On this point, Dr. Hicks says "that the majority are contagious, I have no doubt; whether all are so, I am uncertain. I am inclined to think that those forms derived from the zymotic diseases are the most so; those from the self-generated kinds are least so." Dr. Routh concludes that some forms are contagious and others are not so; and Mr. Wallace believes that it is "what would be called the pyæmic cases which are non-contagious." Dr. Barnes, again, states that "the autogenetic forms proper do not appear to possess active powers of propagation;" and Dr. Fordyce Barker, concurring in this remark, regards this difference of contagious property as one of the proofs that puerperal pyæmia or

septicæmia are generically different from true puerperal fever. I take it, then, opinions coincide pretty generally, that some forms are highly contagious and infectious, others are less so; and it is probable that those arising from extraneous sources are most contagious; those from poison generated in the patient's own tissues least so; or perhaps I may put it in a somewhat more practical form, as a broad rule for guidance, at the risk of being less scientific and precise, that the most acute forms, running to a rapid termination, are most likely to be highly contagious; those which run a more chronic course, and are attended by secondary complications, are least so. Nevertheless, as we do not know yet that even the chronic cases may not in a minor degree be infectious, it behoves us to exercise caution in attending these cases, to purify nurses who have been in charge, and, above all, to be careful not to convey any of the discharges to other lying-in patients.

6. *Relation of bacteria to puerperal fever.*—I quite concur in what has fallen from the several speakers concerning the relation of bacteria and other allied forms to puerperal diseases. We are obviously only on the threshold of that important inquiry; and although the researches of Klebs, of Waldeyer, of Mayrhofer, of Lister, of Sanderson, of Heiberg, and Orth have established a nearly connecting link between bacteria or other allied organic forms and pyæmic processes, the field of investigation is rather one for the pathologist and microscopic observer than the obstetrician. The gynæcologist would, nevertheless, thankfully receive any information which would enable him to cope successfully with these terrible maladies, either in the way of prevention or cure.

7. *The prevention of puerperal fever.*—I turn now to the last division of the subject, which deals with the prevention of puerperal fever, and with what Dr. Playfair calls "the burning question," the conduct of the medical practitioner in face of perils of this kind. And first I would remark, that I concur with much that is contained

in the letter of our distinguished honorary Fellow, Dr. Matthews Duncan, which was read at the May meeting. It would be most disastrous to our profession, and eventually injurious to the public interest, if medical men were liable to vexatious or criminal prosecutions because they were suspected of carrying infection from one patient to another. Members of the medical profession do not need to be reminded by such measures that they pursue their avocations for the public good. I believe no class of men practise more self-abnegation in the exercise of their work than doctors do; and the perils to which they are constantly exposed almost equal the risk of the battle field. This unselfishness has become, in a manner, traditional, and together with it a courage and fearlessness in doing what they consider right at all hazards. I would, however, earnestly warn my brother practitioners not to be misled by some inferences which may be drawn from parts of Dr. Duncan's letter, however high his authority, and as a consequence, indulge in a laxity of precautions, when such momentous interests are at stake. I cannot but think that if any member of our profession had pursued the same course as Mrs. Marsden, under like circumstances, his conduct would have been most reprehensible; and I agree with Mr. Spencer Wells, that he would not be deserving of the sympathy and help of this Society. It is certainly better to err on the side of over-caution than of over-laxity.

The method, therefore, to be pursued for guarding the lying-in woman from noxious influences, consists of all those measures which prevent the formation of poisonous materials in her own system, and which secure her isolation from all contagion from without. In following out the first indication, it is necessary to provide, as much as may be practicable, for a woman encountering her confinement in the best possible condition of health, by impressing upon her the necessity of obedience to natural laws during her pregnancy. If complications occur during pregnancy, they must be combated as the circumstances

will permit. Dr. Barnes has informed us that albuminuria at the end of pregnancy is extremely apt to go into puerperal fever. In these cases, therefore, a sedulous watch must be kept, the bowels must be carefully attended to, and other suitable treatment for these cases adopted. The process of parturition should be conducted with the view to the genital canal of the woman being exposed to the effects of irritation, continued pressure, and laceration, as little as may be possible. After the birth of the child, a full and perfect contraction of the uterus should be secured, by seeing that the organ is not emptied too suddenly, and that the hand follows the fundus down from above as its contents are expelled. Subsequent to delivery, the various known methods should be practised to promote the contraction of the walls of the womb and the diminution of the uterine cavity; and any clots forming should be removed from time to time during the hour after removal of the placenta. It is superfluous to say that the placenta should be extracted in its entirety when possible; and great care should be taken not to leave any detached portions adherent to the uterine walls. The same precautions should be observed, when practicable, in cases of abortion. If any considerable laceration of the perinæum have taken place, the edges of the wound should immediately be united by sutures, not only for the purpose of restoring the perinæum, but to prevent contamination of the wound by putrid discharges. In the case of other wounds in the vagina or cervix uteri, especial care should be taken to keep them clean by repeated injection, and to leave as small a raw surface exposed as may be possible. In all cases where the lochia are in the least degree offensive, the vagina should be well injected with Condy's fluid and water, or other innocuous disinfectant, twice in twenty-four hours, or oftener if necessary; and the injection may be carried into the uterine cavity if it be much distended, and there is a suspicion that it harbours fetid contents. The injection of the womb-cavity, however, should be conducted slowly, carefully, and without force.

These uterine injections were practised long ago by William Harvey, and there is concurrent testimony in this and other countries of their marked utility in abating the symptoms even when puerperal fever has apparently set in.

Next in importance is to take care that there is no fæcal accumulation in the bowels, and to recollect that the existence of previous diarrhœa may be the indication that retained masses are lying in the intestines and producing irritation there. Dr. W. T. Greene has alluded to this during the debate; and it must be within the experience of many how acute febrile symptoms, accompanied it may be, by delirium or incipient mania, have passed away with a proper evacuation of the bowels. I may put it, in short, that, to promote recovery after parturition, every direct or reflex source of irritation should be removed, pure air and water insured, absolute cleanliness observed, and perfect quietude, mental and physical, should be enjoined. Nursing the child should also be recommended when the mother's condition permits, as puerperal ailments have been observed more frequent in women who have not suckled their children.

To secure the isolation of a lying-in woman from noxious influences which may be communicated to her from without may be difficult, and in some cases perhaps impossible; but as Mr. Callender has informed us that surgeons have learned to banish, for all practicable purposes, those affections which may be termed septicæmic from surgical wards of hospitals, so I cannot help thinking that the accoucheur will in time succeed in preventing the like affections in puerperal women, so far, at least, as the heterogenetic cases are concerned. We are all agreed as to the absolute necessity of preventing, directly or indirectly, any communication between cases of erysipelas and puerperal patients. We are agreed also as to the necessity of the midwifery practitioner avoiding all post-mortem examinations. His hands should avoid all contact with specific poisons or septic materials; and if

perchance his fingers have touched anything suspicious, he should at once carefully and thoroughly disinfect them. The necropsies which seem most baneful are of those bodies which have recently died of erysipelas, peritonitis, zymotic disease, or any other inflammatory and febrile affections; and in such instances the accoucheur should not even be present in the room when the dissection is made, as, though he decline to touch, yet his person and clothes may become infected by the poison. There may possibly be a doubt whether one who dissects bodies altered by decomposition or antiseptic injections, as they are commonly found in the dissecting room of medical schools, is so liable to contaminate a puerperal patient as he who makes a necropsy soon after death. Semmelweiss, however, believed that animal matter in a state of putrefaction would cause puerperal fever, and immediately lessened the mortality, during the fearful epidemic of puerperal fever which raged in the Vienna Hospital in 1846 and 1847, by obliging all dissecting students to wash their hands in chlorine or chloride of lime before making vaginal examinations. Impressed by Semmelweiss's views and opinions, I endeavoured, during my occupancy of the chair of Obstetric Medicine at King's College, to prevent students who were frequenting the dissecting-room and post-mortem theatre from attending midwifery cases, and the result was a very small mortality in the outdoor maternity charity.

This care about absolute cleanliness of the hands in attending labours should extend even to occasions when a medical man has had digitally to examine patients suffering from offensive discharges either proceeding from the surface or from the interior of the body. We have heard in this discussion that the discharges from cancer may produce fever in a lying-in woman; and this is probably true of other putrescent discharges. I have had grave anxiety, extending over some weeks, about a patient after her delivery; because I had gone straight from an instrumental case where labour had been so protracted that

febrile symptoms had set in, and the passages had become inflamed, so as to pour out an irritating, muco-purulent discharge.

When a medical man has a bad case of puerperal fever in his own practice, or is required to see one in consultation, he should certainly not go direct to another midwifery patient without first changing his clothes, besides careful ablution of his hands; and he will be all the safer in his ministrations if he adopt some of those precautions mentioned by Dr. Swayne and others, such as using a Turkish bath, or the more radical measures for disinfection recommended by Dr. Wynn Williams, and for the details of which I may refer to his speech.

Many chemical substances have been recommended to be added to water for purifying the hands: iodine, chlorine and its compounds, sulphurous acid, cyanide of potassium, carbolic acid, and the permanganates. It matters not which agent is employed, so long as it is used carefully and efficiently; and if it be necessary to disinfect clothing, this is readily done by exposing it in an oven to a high temperature, for which many upholsterers have a suitable arrangement. With all deference to Dr. Matthews Duncan, I have no doubt that every medical practitioner who earnestly desires to promote the welfare of his patients and to keep himself blameless should at once abstain from attending fresh cases of labour when one or more of those recently delivered by him have died with acute febrile symptoms, or are still so ill as to require his constant visits. When, indeed, there is the remotest suspicion that he may convey the poison in his own person he should not incur the risk of disseminating it. How long he ought to absent himself from midwifery practice is yet a moot point. Dr. Swayne thinks a medical man should seclude himself for a week only; others think a month hardly sufficient. The remarkable experience of Dr. Huntley, of Yarrow, led him to believe that he actually generated poison in his own body, as the result of some faulty process, and then communicated it to his patients.

Taking all the circumstances into consideration, I am disposed to recommend a week's seclusion after regular attendance has ceased on a single puerperal fever case. When a series of cases have occurred in the practice of any one medical man, he should absent himself from midwifery practice for a month at least. During either the short or the longer interval of seclusion, the means for disinfection should be fully carried out.

Finally, I have to say a word or two as to the propriety of attending patients suffering from scarlet fever or other zymotic disease, and lying-in women, at the same time. After what has been said in this debate, I cannot expect the same accord of opinion as on other parts of the ground I have gone over; but I would earnestly beg those who have as yet had so favorable an experience, when attending the two sets of patients conjointly, to ponder well what has been said by others on the reverse side of the question. It cannot be expected that men in general practice, who may be in charge of a scarlet fever or smallpox patient, shall at once relinquish all midwifery practice for the time being, because zymotic diseases are so prevalent that this would practically preclude their attending confinements altogether, or make their attendance on midwifery patients so irregular as to be unreliable. Nevertheless, in view of the dangers which have been indicated by various authorities, albeit their experience may seem to point to different conclusions, general practitioners are bound to exercise vigilance, lest perchance they slip into a pitfall unsuspected by them. In seeing an ordinary case of illness, a medical man rarely stays sufficiently long in the sick room to concentrate any considerable dose of contagium about him, and the after-exposure to fresh air in passing from house to house no doubt usefully dissipates any smaller quantity. I would suggest, however, to those treating infectious cases, and liable at the same time to be summoned to cases of midwifery, or who may be in attendance on puerperal women, that they should not stay long in the sick chamber; not undertake the duties of nurses, as Dr. Duncan puts it;

that they should see puerperal patients before seeing infectious cases, and never go from the infectious case direct to the lying-in room, without changing clothes and the most careful ablutions. Some doctors change their clothes and wash with a disinfectant whenever they have seen infectious cases. Whatever either will, or may, conduce to the well-being of patients, will, I am sure, not be regarded as either too irksome or troublesome by any member of our profession.

Since the last annual meeting the Society has to lament some grevious losses among its Fellows. Foremost among those who have been taken away from us by death, I have to mention the name of our revered Honorary President, Sir Charles Locock. Sir Charles was born at Northampton in 1799. His father was a general practitioner in good position, and from him Sir Charles learned in early life the technical details in dispensing and combining drugs, which caused his *formulæ* in after life to be regarded as patterns of accuracy and appropriateness conjoined. He studied medicine at Edinburgh, mainly under the then celebrated Hamiltons, and took his M.D. degree there in 1821. Coming soon after to London, he attracted the notice of the eminent Dr. Gooch, who earned for himself a reputation which still remains as the most accomplished and elegant of obstetric writers. Sir Charles often repeated to his friends how Gooch, on their first acquaintance, had sent him in the night to an urgent case, which proved to be one of rupture of the uterus. Locock delivered the woman, and gave an opiate. Next day the patient was found by Dr. Gooch so comparatively well that he doubted the diagnosis of his junior, and told him so. Locock, however, adhered to his opinion, and its correctness was proved by the woman's subsequent death and examination. This was the turning-point in Locock's career. Dr. Gooch formed so high an opinion of the young man's capabilities, that he soon put work in his way, and as his own health was declining, he began by degrees to transfer his entire practice to him. Dr. Cumberbatch, who knew him

intimately, and to whom I am indebted for many details of his life, assures me, on Sir Charles's own authority, that at the age of thirty he was making an income of £3000 a year, which went on steadily increasing. At one time in his early career Locock was supposed to be phthisical, and was condemned as a "poitrinaire." This tendency he outgrew, and has repeatedly told me he attributed his recovery to driving in all weathers in an open carriage. Besides being one of the most busy and popular of physicians-accoucheur in private practice, he lectured on midwifery, first at St. Thomas's Hospital and then at St. Bartholomew's. At St. Thomas's he lectured in the winter at the early hour of 8.30 a.m., and was not absent from a single lecture during the whole session.

He increased his practical experience by diligent attendance to his duties as physician, first to the Westminster Lying-in Charity, and later to the General Lying-in Hospital at Lambeth. His medical writings were not numerous, but he contributed gynæcological articles to the 'Cyclopædia of Practical Medicine' and afterwards to the 'Library of Medicine,' edited by Dr. Tweedie. Some of the best known and esteemed of these are the essays on amenorrhœa, dysmenorrhœa, leucorrhœa, and menorrhagia. All are marked by acuteness of observation, and bear evidence of careful clinical study. There was a remarkable practical faculty observable in all Sir Charles Locock did—in his writings and in his daily work. He had a most extensive and versatile experience, which served him in good stead, but besides this he had a rapid power of generalising details, which often made his diagnosis seem as rapid as it was generally correct. His conscientious fulfilment of what he considered his duty to his patients may serve as a model of its kind. However pressing and urgent other summonses might be, he adhered to his rule of not leaving a parturient patient until an hour after her delivery, and he achieved a great reputation for preventing after-pains, his method consisting simply of keeping up pressure over the fundus uteri, and removing coagula so

long as they formed in the os uteri. I am informed also that he was the first to give a dose of ergot before the last expulsive pains in cases of threatened post-partum hæmorrhage; and in 1857, when President of the Royal Medical and Chirurgical Society, he drew the attention of the profession to the utility of bromide of potassium in certain forms of nervous disorder, associated with excitement in the reproductive organs.

Sir Charles was singularly free from strong prejudices, and even late in life was ready to welcome any innovation in practice which gave promise of genuine advantage. When chloroform was introduced into midwifery practice, Sir Charles was one of the first to make use of it and testify to its utility. But the most characteristic features in Sir Charles were his unfailing kindness and his perfect straightforwardness. Beneath a somewhat undemonstrative and cold exterior there was the most sympathetic nature, and those who knew him best were the most warmly attached to him. To his patients he was friend as well as physician, and few men exercised the influence he did, so long as his activity continued. There was a certain directness and clearness in the way he expressed his views and in the directions which he gave to his patients which showed that he had confidence in himself and was master of his subject. This necessarily inspired confidence in others and insured the obedience of his patients. Notwithstanding his overwhelming practice, he had unfailing animal spirits, and his sense of humour even in difficulties was unflagging. He was one of the men that prosperity did not spoil, and who cherished old friendships as well as created new friends by acts of kindness. I bear in grateful memory the recollection of his helping hand extended to me when coming a comparative stranger to London with a letter of introduction. Sir Charles not only wrote me a testimonial for a public appointment, but actually came and voted for me personally. When the Obstetrical Society was founded, he was so pre-eminently the head of the obstetrical department of practice that he was chosen by

common consent its Honorary President. It is well known that Sir Charles was First Physician-Accoucheur to the Queen, by whom he was greatly esteemed. He attended her at the birth of all her children. Her Majesty, indeed, showed her great regard for him by visiting him during his illness, and expressing her sorrow for his loss. After a most useful and exemplary career Sir Charles died at Binstead Lodge, in the Isle of Wight, on the 23rd of July, 1875, full of years and full of honours.

Sir Charles was a Fellow of the Royal College of Physicians; a Fellow of the Royal Society; a D.C.L. of Oxford, and a member of several other learned societies. He was created a baronet in 1857, and he was a Deputy Lieutenant of the county of Kent.

The next death I have to record is that of one of our honorary Fellows, Professor Edward Martin of Berlin, and I have to acknowledge the courtesy of Prof. Otto Spiegelberg, of Breslau, in furnishing me with materials for a short biographical sketch.

Prof. Martin was born at Heidelberg, in 1809, and was first a law student, but eventually elected to study medicine, and became a pupil of the celebrated Naegelé. He graduated at Göttingen. In 1837 he began to lecture on midwifery at Jena, and soon after was appointed director of the newly erected Clinic and Policlinic Institute for Midwifery in the same university. In 1858 he was advanced to the chair of Midwifery and Diseases of Women in Berlin, in succession to Prof. Busch. Among his principal works I may mention essays on "External Version," "On Transfusion in Puerperal Hæmorrhage," and "On Diseases of the Ovaries." He was one of the first who practised ovariotomy successfully in Germany, and who followed extra-peritoneal treatment of the pedicle. Besides, he published a 'Handbook on Midwifery, for Midwifes,' a 'Gynæcological Atlas,' a work on "Flexions and Versions of the Uterus" (two editions), and formerly he was one of the editors of the 'Monatsschrift für Geburtskünde,' which ceased to appear after the issue of

the 'Archiv fur Gynäkologie.' In the last year of his life he published the first number of the 'Zeitschrift für Geburtshülfe und Frauen Krankheiten.' Dr. Martin was a good type of the hardworking, painstaking German professor, who pushed himself to the front by dint of sheer industry and merit. He was for some time the leading obstetric authority in Berlin, and was selected to attend the Crown Princess of Prussia (Princess Royal of England) in her first confinement. He was a kind-hearted, genial man, and many Fellows of the Society will look back with pleasure to having made his acquaintance when he paid a visit with his son to this country some ten years ago.

Among our ordinary Fellows we have eleven deaths to lament, viz.:—Joseph Dickson, M.D., Jersey; James Clark, M.D., Regent's Park Road; Philip Rowling Heeman, F.R.C.S., Clifton; George Shaw, L.R.C.S. Edin., Battersea; J. Myers Briggs, Coeymans, New York; Joseph Maldon Dempsey, M.D., Charterhouse Square; John Ward, M.R.C.S., Penistone, Sheffield; Edward Leech, M.R.C.S., Chichester; Thomas Brown, M. D., 236, Kennington Park Road; Edward Lorenzo Desmond, M.D., Liverpool; and Dr. Squarey, London. All except the two last were, I believe, engaged in general practice, and did good service to the commonwealth in their several capacities. Dr. Desmond was a prominent obstetrician and gynæcologist in Liverpool, surgeon to the Lying-in Hospital, and was greatly respected for his high professional character and geniality.

The general condition of the Society is highly satisfactory. The number of Fellows continues to increase, and the funds are in a most prosperous state. The property belonging to the Society has so increased that its present location is no longer able to contain it, and it has become a serious question with the Council whether more extensive premises should not be acquired—opportunity serving—for a more commodious library, museum, and permanent home for the Society. The munificent donations of pelves and gynæcological casts, by our distinguished Honorary

President, Dr. Arthur Farre, are in the mean time almost an embarrassment, but it is hoped ere long that some solution will be found for the difficulty, and that the preparations will be displayed in a manner worthy of their importance.

It was then moved by Mr. Spencer Wells and seconded by Dr. Henry Gervis:

"That the best thanks of the Society be given to the President, Dr. W. O. Priestley, for his admirable address, and that he be requested to allow it to be printed in the next volume of the 'Transactions.'"

FEBRUARY 2ND, 1876.

WILLIAM O. PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

Present—68 Fellows and 26 visitors.

Books were presented by Dr. W. F. Hutchinson, Dr. A. R. Simpson, Dr. J. Lucas-Championnière, Professor F. Rizzoli, St. Bartholomew's Hospital Staff, the Edinburgh Obstetrical Society, and the Editor of the 'Chicago Medical Journal and Examiner.'

Walter H. Leighton, M.D. (Lowell, Mass.), and John Hanbury Parsons, M.D., were admitted Fellows; and Francis B. Lee, F.R.C.P. Ed., and A. H. Orpen, A.B., were declared admitted.

The following gentlemen were elected Fellows of the Society:—C. T. Brookhouse, M.D., Martin Brunjes, M.R.C.S., J. H. Crowdace, L.S.A. (Beverley); Isaac N. Jakins, M.R.C.S., Leslie Jones, M.D. (Blackpool), Charles Knott, M.R.C.S. (Portsmouth), W. H. Leighton, M.D. (Lowell, Mass.), John H. Parsons, M.D. (Toronto), G. Sirignano, M.D. (Naples), F. Wells, M.D. (Cleveland, Ohio), and Jos. C. Wilkinson, L.S.A.

The following gentlemen were proposed for election:—David Finlay, M.D., Litton Forbes, L.R.C.S. Ed., Geo. E. Herman, M.R.C.P., Henry T. Lanchester, M.D. (Croydon), Geo. Herbert Lilley, L.R.C.P. (Coventry), Henry

A. Lovett, M.R.C.S. (Powick), Alex. D. L. Napier, M.B. (Fraserburgh), and C. S. Redmond, L.K.Q.C.P. (Ireland).

SELF-ADMINISTRATION OF ANÆSTHETICS.

Dr. J. M. Crombie exhibited an apparatus, the object of which was to make chloroform or ether *prescribable* for the relief of severe pain or sleeplessness, as it affords the means to patients themselves to inhale those agents with security, being thereby enabled to take as much as will relieve them, but cannot possibly take more. It is well adapted to obstetrical use when the minor degrees of anæsthesia only are required, the patient herself then being the administrator. In country practice especially the value of such an adjuvant will be readily understood. Dr. Crombie's principal reason for presenting it to the Society was that, without seeing the instrument, it is difficult fully to understand its *modus operandi*.

By means of the absorbent in the bottle the anæsthetic is rendered practically solid, while it is the vapour only mixed with air that passes at each compression by the hand ball into the inhaler. This generally economises the anæsthetic, and makes it much more agreeable than when inspired from direct evaporation.

It may be obtained from Messrs. Mackey and Co., 1 and 2, Bouverie Street, Fleet Street, E.C.

The President thought it might be of use to soothe nervous patients in the early stage of labour.

Dr. Bantock entered his protest against giving to the public facilities for the self-administration of chloroform as a dangerous practice. Admitting the force of this objection, he considered the apparatus much inferior to Dr. Junkers of which it was an imitation. As an apparatus for the use of the medical man the necessity for frequent charging would prove a great drawback in midwifery practice, and it would be found even more inconvenient for a prolonged and continuous administration.

Dr. Cooper Rose expressed his admiration of the ingenuity exhibited by the inventor, but stated that apparatus of all kinds were more or less objectionable. When he desired that his patient should be only *partially* under the influence of chloroform, he had for many years adopted the simple plan of putting a few fragments of blotting paper at the bottom of a tumbler on which he poured a small quantity of the liquid. This the patient held over her nose and mouth; as soon as the muscles of the hand and arm became relaxed, and before complete anæsthesia was induced, the glass fell harmlessly into the bed. The free admixture of air, and the inability of the patient to hold the glass too long over the mouth, rendered this simple mode of giving chloroform innocuous. He always retained possession of the bottle of chloroform for obvious reasons.

Dr. Savage acknowledged that patients accustomed to take chloroform should have a safe apparatus, but he thought that both chloral and chloroform were doing much harm, and should not be administered without medical supervision.

LARGE FIBROID TUMOUR IN THE UTERUS.

Dr. Daly exhibited the uterus of a lady who died twenty-seven days after delivery, the uterus containing a large fibroid tumour. When first seen the lady was three months advanced in her first pregnancy and was in her thirty-ninth year. She complained of intense pain in the right side, extending from the right inguinal region upwards. By examination the uterus could be made out in the median line, and springing from it, as it were, a second tumour, nearly as large as the fœtal head. As pregnancy advanced the differentiation of the uterus and tumour became more difficult, and at five months it was impossible; but the uterus now lay obliquely across the abdomen, the fundus being at the right hypochondrium. Dr. Barnes saw the case in consultation at this period, but the tumour could not be felt. Dr. Barnes advised a belt, and that the patient should lie as much as possible on the left side, and take full doses of Pot. Bromid.

with her opiate, to relieve the intense pain in the right side. She improved considerably under this treatment for a time, but the pain continued more or less during the nine months. Labour began on the 2nd of January, the pains were weak, but the "os" dilated well and quickly; soon after it was dilated there was a violent gush of hæmorrhage, and the patient became blanched, but some brandy, with a full dose of ergot, revived her. Presently she had another alarming gush of blood, and became almost pulseless; more brandy and ergot were administered, and the long forceps immediately applied. There was no difficulty about the delivery, which was effected in about ten minutes; she flooded after the birth of the child (the child, a female, was alive and strong), and on introducing the hand, to remove the placenta, the uterus was found to contain a large intra-uterine fibroid; any attempt to move the latter would have been immediately fatal, as the patient was collapsed. The hæmorrhage was controlled with difficulty. For fourteen days the patient progressed most satisfactorily. The vagina was washed out every day with Condy's fluid, a teaspoonful to a pint of water, one of Higginson's syringes being used. On the fourteenth evening her temperature was normal, but she complained of pain in the right calf, which was tender, but not swollen, the femoral vein not being at all hard or tender. The next morning the temperature was 103°, in the evening 105·2°, and the right calf was two inches larger round than the left, the thighs being exactly alike, and no hardness of the femoral vein; no abdominal tenderness. She continued in this state for a fortnight, her appetite failed completely, she could take nothing but champagne and brandy; she was occasionally sick, sweating a little, and with a morning temperature of 103°, and an evening temperature 105°. She died twenty-seven days after delivery. I was only permitted to examine the abdomen, there was not a trace of peritonitis, and the uterus contained this tumour exhibited.

Dr. SAVAGE inquired as to where the temperature had been taken.

Dr. DALY replied in the axilla and mouth.

The PRESIDENT inquired if the preparation had been immersed in a disinfecting fluid. He recommended that all specimens relating to women who had died shortly after delivery should be thoroughly disinfected before being brought to the Society, lest perchance the Fellows in handling the preparations should convey poison to other patients.

Dr. CLEVELAND asked if any injections had been made into the uterine cavity.

Dr. DALY, in reply, stated that he had employed Higginson's syringe, the tube being carried up to, but not within, the os uteri.

EXTRA-UTERINE FŒTATION.

DR. CHALMERS exhibited a specimen as one of extra-uterine fœtation. The mother, a well-nourished woman, of intemperate habits, died suddenly a few days ago, and on making a post-mortem examination a tumour was found lying to the right of the uterus and somewhat behind it. The tumour was involved in the appendages of the uterus, but free of the walls of the pelvic cavity. The tumour, about the size of a small orange, was filled with a thick brown pasty substance, which on being dissolved in water showed no organic *débris*. The wall of the tumour for fully the half of its extent consisted of a hard covering resembling some portion of the fœtal skull, but whether it was bone or the calcareous wall of a cyst the exhibitor was unable to verify. There was found also in the tissues between the uterus and rectum a hard irregular substance resembling a fœtal vertebra.

The death of the mother was in no way connected with the uterine condition. She was fifty-four years old. Had eight children; the last being born in 1852. Eight or nine years ago she believed she was pregnant and carried the child for four or five months, the abdomen

enlarging accordingly. About that time she became ill, and a doctor was sent for, who told her she suffered from a false conception or something of that sort. After being a day or two in bed she got about again, and told a neighbour that she was all right now, as the whole thing had gone down the water-closet. Whether this expulsion took place per vaginam or per rectum no one knows. She never menstruated after, and so far as the husband remembers she never complained of any particular abdominal disturbance.

The PRESIDENT thought the case interesting, and suggested Dr. Galabin should examine the specimen in conjunction with Dr. Daly.

DOUBLE OR DICOTYLEDONOUS PLACENTA.

MR. W. T. GREENE exhibited a double or dicotyledonous placenta.

The specimen consisted of two placentæ enclosed in one membranous bag; when fresh the separation between them, not now quite so apparent, was very well marked indeed. Each placenta has a distinct plexus of veins terminating in a funis of about four inches in length, which then coalesces with the other, and the remaining portion in nowise differs from an ordinary funis.

The general appearance of the specimen may, I think, be not inaptly compared to a seedling plant, of which the funis is the stem and the two placentæ the cotyledons.

There was no sign of duality about the child, which was a healthy female born at full term.

Dr. HAYES questioned whether it was a fair specimen of a double placenta. There was an atrophied portion in the centre, which gave it that appearance.

The PRESIDENT thought it of sufficient interest to preserve in the museum.

[The following note by Dr. Meadows was read at the December meeting, 1875; but as it was understood that Dr. Braxton Hicks would at an early meeting present the specimen referred to, together with some experimental observations, it was thought desirable that Dr. Meadows' note and Dr. Braxton Hicks' paper should appear in the same volume of the 'Transactions.'—EDS.]

NOTE ON THE POST-MORTEM DIAGNOSIS OF A NULLIPAROUS UTERUS.

By DR. ALFRED MEADOWS.

REFERRING to the now celebrated trial of the brothers Wainwright for murder, he remarked on the extreme importance of being able to diagnose, post mortem, whether or not a uterus had ever borne a child, and on this point he invited the opinion and experience of the Society.

In the case referred to he thought it was probably not too much to say that if any absolute test existed whereby a positive opinion in the negative could have been given the whole case for the prosecution must have failed on the first indictment, for it was well known that the person alleged to have been murdered had borne children. He, however, knew of no such test; nor did he think it could be affirmed, on the contrary, that this uterus had ever been gravid. So far as appearances went, the thinness of the uterine wall, which in this case barely exceeded a quarter of an inch, and the distinctly convex shape of the internal aspect of the uterine wall, inclined him to the opinion that this was a nulliparous uterus. Accordingly, the evidence which he gave at the recent trial was to the following effect: first, that, as a general rule, no absolutely certain opinion can be given by post-mortem examination only, even under the most favorable circumstances, on the question whether or not a woman has borne a child. Secondly,

that on the question of probability some reliance may be placed on the internal appearance of the uterine walls, especially with reference to their convexity. Thirdly, that so far as this particular uterus was concerned there was certainly no proof that it had borne a child; but that, on the contrary, the evidence, doubtful and unreliable as it was, tended rather in the opposite direction, and justified an expression of opinion to that effect.

The author then referred to a very delicate question of a medico-ethical character, viz. as to whether a scientific witness is at liberty to allow his private judgment on the general merits of a case to influence his opinion on a purely scientific question. Upon this point also he invited the opinion of the Society.

Dr. J. Braxton Hicks considered from what had fallen from various speakers at the last meeting of last year that it might be interesting to the Fellows to inspect the uterus referred to at the trial of Wainwright, admitted by him inferentially to be that of Harriet Lane. He therefore, through the kindness of Mr. Larkin, produced it for their inspection. It might be asked why he should have brought it rather than others, but the fact was that long before the trial, whilst it was in the condition in which it was removed from the remains, he had been shown it by Mr. Larkin; but in this state it was so difficult to make out the relative size and position of part that he suggested to the consideration of the medical gentlemen on both sides that it should be placed in water with some disinfectant. This was done, and the result appeared in the specimen now present. It appeared as if recently removed from a body which had undergone some slight decomposition. It had all the characters which writers

had been wont to attribute to a uterus of a multipara, and Dr. Hicks was prepared to say as much had he been called upon to give evidence at the trial.

But there were other reasons than curiosity, for which Dr. Hicks considered it useful to bring forward this specimen. They were two, and closely connected with jurisprudence; both of them bore upon the identification of human remains.

The first was the advantage of soaking the dried specimen in water. This applied not only to the uterus but to many parts of the body, such as the heart, for it might in certain cases be necessary to distinguish between the remains of man and those of other animals. Dr. Hicks was not aware of any other trial requiring proof of a similar kind to this, where the drying of the remains was so complete. Yet it is not so unlikely a case but that it might again occur. It is well that facts should be examined which could assist in elucidating the subject.

Now, the idea which will probably strike thinkers on the subject is this, whether the process of drying and resoaking produces any alteration in the shape of the organ, and especially if a certain amount of decomposition has occurred also. Now, though the time had been too short to inquire into the effect of decomposition, Dr. Hicks, assisted by his son, Dr. Edward Hicks, had made some experiments on the other points, the results of which he had tabulated.

He had obtained six uteri, measured them, and had them dried; afterwards they were again measured. Then after soaking them in carbolised water, they were a third time measured.

The drying, it would be noticed by the table, caused most of the measurements to be lessened, according to the amount of drying, but it also made it more difficult to define the outlines of the organ, and owing to the agglutination of the sides, next to impossible to measure the internal length.

Dr. Hicks thought this subject worthy of further investi-

gation, both in regard to the uterus as other parts of the body. Indeed, it appeared to him that the whole body, and notably the face, might be submitted to the same process. Whether, however, the identification of the features of an Egyptian mummy might be made out, he would leave to future experiments to prove. But in the case of the uterus before the Society a certain amount of decomposition had occurred. It would be necessary, in any experiments of a parallel nature, to allow a certain amount of putrefaction to proceed before complete drying. No doubt there was loss of tissue and consequent thinning of the walls.

It is a subject of regret that the measurements of this uterus were not taken before it was placed in water.

The relative form of its parts, however, did not appear different.

The second point connected with this subject is as to the possibility of saying whether any given uterus was that of a woman who had borne children, and this was the point alluded to by Dr. Meadows.

Perhaps we might ask another question, Can we say positively that a given uterus has never conceived?

The speaker thought all would concede that the uterus of a woman who had been delivered within a twelvemonth would be very distinguishable from that of a woman who had never conceived and which was in perfectly natural state. The characters of globosity are not so readily effaced; but at a later period, or when the atrophy of age had set in, would such a uterus revert to the virgin type, so as to be indistinguishable from it? Upon this point Dr. Hicks considered we required further knowledge. Again, supposing in a virgin there had been obstruction to the exit of the secretions, and a certain globosity had been produced, with hypertrophy of the walls, would such an organ be distinguishable from one which had some years since been distended by pregnancy? Of course it will be answered in that case, The obstruction will remain its own evidence. Yet it might not be so

very apparent as to be indisputable. It will appear from the examination of one of the tables now presented that the arching of the fundus was greatest in one who was said not to have borne children, even greater than one which was the largest, that had borne children, and had small fibroids enclosed in the walls.

Dr. Hicks hoped some of the Fellows present might be able to add to our knowledge on the matters alluded to, but he ventured to suggest that a committee be appointed who would carry out investigations on the matters referred to, collect information from the Fellows, and finally form a report which might enhance the value of the 'Transactions,' by the recordation of facts.

With regard to the uterus now under consideration Dr. Hicks thought, as there was some difference of opinion of the gentlemen engaged on the trial, that the same committee should examine it and report in due time.

Measurements of uterus in various conditions (in inches).

No. 1.—No children.

	Before drying.		Dried.
Height of fundus	1	...	$\frac{3}{4}$
Between Fallopian tubes	$1\frac{3}{4}$	...	$1\frac{1}{2}$
External length	$2\frac{3}{4}$	...	$2\frac{3}{8}$
Internal length	$2\frac{1}{2}$	...	—
Antero-posterior	$\frac{1}{2}$	...	$\frac{3}{8}$

No. 2.—No children.

	Before drying.		Dried.
Height of fundus	$\frac{3}{4}$	...	$\frac{3}{4}$
Between Fallopian tubes	$1\frac{3}{4}$	...	$1\frac{3}{4}$
External length	2	...	$1\frac{7}{8}$
Internal length	$1\frac{1}{2}$	...	—
Antero-posterior	$\frac{3}{4}$	...	$\frac{1}{2}$

No. 3.—Had children. Small fibroids in the walls.

	Before drying.		Dried.
Height of fundus	$\frac{7}{8}$	...	$\frac{7}{8}$
Between Fallopian tubes	$2\frac{1}{4}$	...	$2\frac{1}{4}$
External length	$3\frac{3}{4}$	...	3
Internal length	$2\frac{1}{2}$	...	—
Antero-posterior	$1\frac{3}{4}$	...	$\frac{1}{2}$

No. 4.—Had children.

	Before drying.		Dried.
Height of fundus . .	$\frac{3}{8}$	...	$\frac{3}{8}$
Between Fallopian tubes .	$1\frac{6}{8}$	...	$1\frac{4}{8}$
External length . . .	$2\frac{4}{8}$	...	$2\frac{4}{8}$
Internal length . . .	2	...	—
Antero-posterior . . .	$1\frac{3}{8}$	...	1

The two latter specimens were not quite so dry as the former.

No. 5.—Had children.

	Before drying.		Dried.
Height of fundus . .	—	...	—
Between Fallopian tubes .	2	...	2
External length . . .	$2\frac{1}{8}$	...	$2\frac{1}{8}$
Internal length . . .	—	...	—
Antero-posterior . . .	$1\frac{1}{8}$	...	$1\frac{1}{8}$

No. 6.—Had children.

	Before drying.		Dried.
Height of fundus . .	—	...	—
Between Fallopian tubes .	$1\frac{1}{8}$	...	—
External length . . .	2	...	2
Internal length . . .	—	...	—
Antero-posterior . . .	$\frac{1}{8}$	...	$\frac{1}{8}$

The dried specimens gave some difficulty in measuring, as the outlines of the parts were not so distinct as in the wet state.

Dr. Edis exhibited several specimens of uteri, both nulliparous and multiparous. Their weights and measurements had been accurately determined, and their general condition noted as regards the arching of the fundus, form of the cervix, shape of the os uteri, &c., and, in addition, the appearances presented on section of the ovaries. In the case of one uterus, the subject of a recent delivery, the appearance of the vessels in the walls on section were very distinct; but, as regards forming a definite opinion in doubtful cases, further research seemed necessary.

	Uterus.						Ovaries.
	Length of uterus.	Length of cavity.	Breadth of fundus.	Breadth of cervix.	Width of os.	Weight.	
Nulliparæ.							
S. J—, æt. 38, married. No children; no miscarriage.	3 inches	2½ inches	1½ inches	⅝ inch	⅜ inch	2 ounces 30 grains	Large, fleshy; several small cystic spaces; distinct Graafian follicles with pigment.
C. M—, æt. 19, single. Died from rheumatic fever.	2⅝ „	2⅛ „	1⅜ „	1 „	¼ „	1½ ounces nearly	Dense, small, firm; numerous small cysts; distinct recent corrugated Graafian follicle; no pigmentation.
J. B—, æt. 30, single. Died from bronchitis.	2½ „	2¼ „	1⅜ „	1⅛ „	⅛ „	2 ounces 3 drachms	Dense, fleshy; corrugated externally; very few minute cysts; no puckered cavities.
Multiparæ.							
M. H—, æt. 62, widow. 2 children.	2½ „	2⅛ „	1¼ „	⅛ „	⅜ „	2 ounces 3 drachms	Round, whitish, cartilaginous, almost cretaceous, with numerous small and large cysts both internally and externally.
L. W—, æt. 45, widow. 1 child.	2½ „	2⅛ „	1⅜ „	1⅛ „	⅜ „	2 ounces 40 grains	Small, atrophied, with remains of several small and large cysts.

Dr. SAVAGE said there were instances innumerable wherein it was impossible to decide whether the uterus under notice was one of involution so called, or one which never had contained an ovum, in other words, whether the subject had or had not been pregnant. Considering the sort of treatment to which nowadays a nulliparous uterus may have been subjected, would it not be wrong, in any given instance apart from the history, to hazard a conjecture? Now this was the real question before the Society, and he much regretted the revival and introduction into it of the sad case of Harriet Lane, whose miserable remnants brought forward in support of opinions quite unjustifiable reminded him of little else than a rotten oyster. Though no possible good could come out of it, this piece of decomposition and disfigurement having been forced into the discussion, he believed he should be in order in requesting Dr. Hicks to specify more particularly the grounds on which he came to the conclusion, first, that the thing had once been a human uterus, and being so was one that had once been pregnant. Dr. Hicks was of course aware that his opinions were antagonistic to those given by another eminent member of the Society; an interest of no common kind attached to the circumstances which could have given rise to these rival opinions. Until it could be determined what might be the standard measurements of a pattern uterus, Dr. Hicks' table of measurements could be of no avail. The normal uterine variations in this respect were infinite, and bore no constant relation with "parity," or the contrary. The higher arching of the fundus and greater distance between the insertion of the Fallopian tubes, relied upon as one of the leading signs of previous pregnancy, was a sort of evidence demolished at once by two of the many fresh specimens on the table, brought most opportunely by Dr. Edis, the nulliparous specimens being the more arched of the two. What could possibly come out of the contemplation of Dr. Hicks' specimens of uterus soddened after previous desiccation? Perhaps the medical experts for the prosecution would favour the Society with the requested explanation. Mr. —— and Dr. Bond each repeatedly proposed to do this, but were stopped by the President, who held that the discussion was in pursuance of a scientific inquiry, into which matters pertaining to the trial could not properly be introduced.

Dr. BARNES confessed that he saw no positive grounds free from fallacy by which we could say an uterus had borne a child. We could not insist upon the weight or size, as the uterus might be enlarged from hyperplasia. One condition had not been sufficiently insisted upon, and that was the arching of the fundus externally between the broad ligaments. The condition of the os uteri, too, might throw some light upon the question, but this was open to fallacy, as the split edges and lobed appearance of the cervix might be due to incision and not to parturition. If

there were no appearances of the breasts or abdominal walls to guide us, the condition of the uterus alone must be received with very great caution. The arching of the uterus, the split condition of the cervix, and the size of the uterus, might afford fair presumptive evidence of pregnancy.

Dr. SAVAGE reminded Dr. Barnes of the specimens on the table previously alluded to; in other respects he quite agreed in all that had fallen from Dr. Barnes.

Dr. JOHN WILLIAMS.—The diagnosis of the existence or non-existence of a previous pregnancy cannot be made from the shape or size of the body of the uterus, thickness of its walls, form of its cavity and deformities in the os and cervix for all the changes which are brought about by pregnancy and labour in the above characters may be produced or simulated by other causes, as polypus, fibroid and other diseases. There are, however, two appearances which are of greater value in deciding this point, and one of them when found is absolutely diagnostic of pregnancy having previously existed,—I mean the condition of the sinuses in the wall of the uterus under the placental site. These become filled with clots which become organised and are said to have been seen six months after parturition. The second point is the condition of the vessels in the walls of the uterus. They form small patent tubes with thick yellowish-white walls and give the tissues a worm-eaten appearance. It is so far as my experience goes permanent. It has been well marked fifteen years after parturition, and so far as I have been able to ascertain it is not simulated by any disease of the uterus.

Dr. SNOW BECK remarked that his experience did not accord with observations of Dr. J. Williams, for in the many uteri he had examined, at all periods of time after parturition or miscarriage, he had not met with any coagula or remains of coagula in the sinuses, except occasionally and to such a small amount as to show it was only accidental. In a section of the walls of a multiparous uterus the arteries generally stood out from the cut surface more than in a multiparous organ, the middle coat also appeared thicker, and the canals were more patent. A similar effect was also noticed from any cause which produced enlargement of these vessels. But he had not met with coagula in the uterine sinuses, either at the seat of the placenta or elsewhere, even within three months after parturition, or in any organ that had returned to the size it was previous to impregnation. Coagula were sometimes met with at the orifice of some of the sinuses soon after parturition, and extending a short distance into those canals; but this was very different to the existence of coagula or the remains of coagula in the sinuses six months after parturition, and in sufficient amount to justify any one in affirming that a previous pregnancy had existed. He did not mean to say that because he had not met with these coagula, or

remains of coagula, therefore they did not exist. But he would consider it very strange if these coagula were so constant as had been represented, that he had never run against them in any of the numerous uteri he had examined with much care, and extending over a period of several years. At the present moment he had two uteri in his possession, both taken from ladies who had died within three months, one after parturition, the other after a miscarriage between the sixth and seventh month. They were both recent and very interesting cases, which he hoped to bring before the Society at an early meeting, and so far as his knowledge extended, showed a class of diseases which had not yet been noticed. The tissue at the inner surface of the uterus where the placenta had been situated had been converted into a slough in the one case, and been removed, by some process, in the other, the consequence being secondary hæmorrhage from the utero-placental arteries, and exposure of the open orifices of the sinuses, followed by septicæmia and death. It was true he had not examined these uteri so fully as to say that no coagula was to be found in them. So far as the examination had been made he believed the uterine sinuses were free from the remains of any coagula; but he would willingly place them at Dr. Williams' disposal, and if he could find any coagula in the sinuses he certainly would be much surprised. Latterly he had not examined the condition of the sinuses so completely as he had been accustomed to do at one time; for so little had been found in them except what was taken from the inner surface of the organs. In many cases the evidences that an uterus had undergone the growth consequent upon pregnancy were pretty decided. This growth, which caused an enormous increase in all the tissues, was very often not completely removed after parturition, in which cases the organ remained uniformly enlarged, and presented those characters which were well known to all conversant with this subject. Not a few cases, however, are met with where the uterus had returned so nearly to the condition previous to impregnation, so that he would be a very bold man indeed who could go into a court of justice and give any decided opinion upon the appearances observed, which would jeopardise the life or the character of any individual. The changes induced by some diseases of the unimpregnated organ also increase, every now and then, the difficulty in distinguishing between an organ which had never been impregnated and one which had undergone the growth consequent upon pregnancy, and the subsequent reduction in size to the condition of the non-gravid organ.

Dr. Savage said he believed Dr. Beck was right. The uterine sinus system was a thing of the past; it received its death blow from Dr. Hicks, whose exhaustive papers on the subject had already appeared in the 'Transactions.' In separating placenta

prævia from the uterus, the finger came in contact with no large veins; nothing was easier than the detachment of the placenta. As was well known hæmorrhage ceased on its complete separation; the uterus, of course, remaining still uncontracted.

Dr. BANTOCK said the important question to which an answer was desired was, is there any sign which will enable us to affirm of a given uterus that it has ever contained a full-grown fœtus? In the living subject, even with a full knowledge of the history of the case, it was impossible to answer the question from the condition of the uterus. Thus he had seen cases of atrophy of the uterus, at an early age, both in the virgin and mother, in which there was no difference between the two conditions as indicated either by the size or other peculiarities of the uterus, either of the body, cervix, or os, either by manual or ocular examination. On the other hand, chronic inflammation of the uterus produced such changes in the organ that the determination of a previous existence of pregnancy was equally impossible. He was therefore of opinion that the question must be answered in the negative.

Mr. BOND remarked that Dr. Meadows stated that the object of his previous note had been simply to raise the question whether there were any definite signs by which previous pregnancy could be diagnosed. As a general rule, he thought no absolute certain opinion could be given. Dr. Savage was under a misapprehension in assuming that in the case of Harriet Lane he (Mr. Bond) attached any importance to the state of the uterus. When first removed from the body it was excessively small, and the walls as thin as stout brown paper; all fibrous structure had disappeared, and it had a soapy feel. When soaked in weak spirit and water it enlarged to three times its original size and assumed the flaccid condition it is in at present. He said at the trial that from the large size of the cavity, compared to the thinness of the walls, he inferred it was multiparous; the great thinness of the wall being due, undoubtedly, to the general drying up of the body. After soaking, the great enlargement which took place strengthened his inference. He could give no positive opinion either way; in fact, the only thing he was positive about was that no one could say with certainty whether it was multiparous or nulliparous. Too much importance was attached to it at the trial, and he thought the Society would be merely wasting the time of the meeting by further discussing the question of Harriet Lane's uterus. The general opinion of the meeting entirely corroborated his own, viz. that no one could possibly give a positive opinion regarding it.

Dr. ROGERS said he had now had an experience of over thirty years in examining uteri, and had come to the conclusion that on the important subject of that evening's discussion, a positive opinion founded on precise and unimpeachable data could not be

given; he quite concurred in the remarks made by several of the preceding speakers that there were such divergences from what was usually found to be the normal size, weight, configuration, and shape of cavity in nulliparous and multiparous uteri, that no positive opinion in every case from examination alone of the uterus itself could be given. Dr. Rogers had brought to the Society two uteri which were now before the fellows for inspection, and as far as could be ascertained from previous history, these were virgin uteri, yet how very different were they from each other, and such differences were noted in uteri that had borne children. Dr. Rogers would be indeed glad if other observers could agree with Dr. Williams and substantiate the statement he had made to-night.

Dr. HAYES called attention to the remarkable thinness of the uterine walls as compared with the large size of the cavity, in the specimen exhibited by Dr. Hicks. He thought the thinness could be explained, partly by the relaxation of the muscular fibres after the disappearance of the rigor mortis, and partly by the desiccation of the tissues. Doubtless, too, the dust-like disintegration of the tissues, during the lapse of time, had something to do with it. The great influence of muscular spasm, preserved by cadaveric rigidity, in producing thickening was best seen in the walls of the heart. There the thickening, with proportionate diminution of the corresponding cavity, used to be regarded as a form of hypertrophy, and had been called "concentric hypertrophy." The same influence is noticed in the walls of the bladder and the intestines. The complete drying of the tissues must also be taken into account. Soaking of the dried uterus in water, as Dr. Hicks had proved, would to some extent bring back its normal appearance of form and thickness. But it was impossible to suppose that this process could ever permeate the tissues with fluid in the same fashion as the heart during life. Again, small particles of disintegrated tissue would doubtless be lost during exposure to air, and during soaking. On these grounds, mere thinness of the walls of the uterus under the circumstances of the case, was of no value in deciding the question before the Society.

MARCH 8TH, 1876.

WILLIAM O. PRIESTLEY, M.D., F.R.C.P., President, in the chair.

Present—40 Fellows and 6 visitors.

Books were presented by Dr. G. Berruti, Dr. G. Chiarteoni, Dr. M. de Cristoforis, Dr. John S. Parry, Dr. Shortt, Dr. Tilt, Dr. Yandell, and the Smithsonian Institution.

Edward J. W. Hicks, M.B., George Richard Cundell, M.R.C.S., and Charles Henry Johnson, M.R.C.S., were admitted Fellows; and C. T. Brookhouse, M.D. (Deptford), and Charles Knott, M.R.C.S. (Portsmouth), were declared admitted.

The following gentlemen were elected Fellows of the Society: David Finlay, M.D., Litton Forbes, L.R.C.S., Ed., Geo. E. Herman, M.R.C.P., Henry T. Lanchester, M.D., George Herbet Lilley, M.R.C.S. (Coventry); Henry A. Lovett, M.R.C.S. (Worcester); A. D. L'Napier, M.B. (Fraserburgh); and C. S. Redmond, L.R.C.P. (Ireland).

The following gentlemen were proposed for election: John P. Baker, M.R.C.S., F. H. Champneys, M.B., M. O. Coleman, M.D., John Gill, M.D., A. C. Godfrey, M.B. (Jersey); J. E. Grinfield Coxwell, L.K.Q.C.P.I. (Worthing); J. E. Hebblethwaite, M.D. (Bawtry); J. W. Roe, M.D. (Ellesmere); G. M. Sharpe L.S.A. (Leeds); L. D.

Spencer, M.D., F. W. Spurgin, M.R.C.S., A. Weir, M.D. (Great Malvern); A. T. T. Wise, M.R.C.S. and E. Worts, M.R.C.S. (Colchester).

Report on Dr. Chalmers' specimen of Extra-uterine Fœtation.

The specimen consists of the uterus, ovaries, and adjoining parts, including a portion of the rectum. Posterior to the right ovary is an ovoid cyst, $1\frac{9}{10}$ inches in length. This is lined in great part by a hard substance, resembling in shape the vault of a fœtal skull, having its convexity upward, and its long axis placed transversely. No sutures or fontanelles can be made out, but near one extremity are two detached plates placed symmetrically at the two sides. The cyst is closely in contact with the ovary, the substance of which is partially spread over it. It is covered everywhere by peritoneum, except where it is in contact with the cellular tissue round the ovary, and at the base of the broad ligament. The hard substance, on microscopic examination, is found to have the structure of true bone, both Haversian canals and spaces, and lacunæ being distinctly seen. Embedded in the cellular tissue between vagina and rectum is a hard body $\frac{7}{10}$ inch in length. It is somewhat oblong in shape, but cannot be identified by its form as any individual fœtal bone. On microscopic examination it is found to have an osseous structure, but not so perfect as that of the bony vault.

Both Fallopian tubes are quite free and unconnected with the cyst. The right ovary contains two cysts respectively $\frac{4}{10}$ and $\frac{5}{20}$ inch in length. These have hard, thick, puckered walls, resembling those of a corpus luteum. The left ovary contains one similar cyst $\frac{3}{10}$ inch long, and also a larger cyst, having thin walls, $\frac{1}{2}$ inch in length. The internal measurement of the uterus is $2\frac{1}{4}$ inches. A mucous polypus $\frac{9}{10}$ inch in length, moulded to the shape of the uterine cavity, is attached by a small pedicle to the fundus.

We are of opinion that the bones found are portions of a fœtus, the remainder of which had escaped either by the rectum or vagina, and that the ovum must have become fecundated in the ovary, and have been developed in the cellular tissue in its neighbourhood.

ALFRED L. GALABIN.
J. CHALMERS.

RECTAL PROTRUDER.

DR. AVELING exhibited an instrument for pressing upon the posterior wall of the vagina with which the rectum might be protruded through the anus for examination. He was induced to have it made, not to supplant the finger, but to be used when the resistance was unusually great, or when to facilitate any operation, the protrusion had to be kept up for some time. In the latter case the finger often became painfully cramped. It consists of a bulb three quarters of an inch in diameter with a stem bent at right angles two inches from the bulb and continued seven inches. to form a handle. It is made of iron coated with nickel, by Messrs. Krohne, Duke Street.

SPECIMEN OF MYXOMA IN A FŒTUS IMPEDING DELIVERY.

DR. HAYES exhibited, for Mr. B. White of Twickenham, a fœtus which had presented by the brow. Forceps were applied, but failed to effect delivery. The left frontal eminence was perforated, and the head brought down, when a further obstruction was discovered from a

large tumour near the shoulder, extending from the sternum nearly to the vertebral column. On opening the tumour, some sero-sanguinolent fluid escaped, and delivery ensued. It seemed to be formed of loose connective tissue, which had undergone mucoid degeneration.

The PRESIDENT remarked that, in external aspect, it resembled an enormous nævus he had once seen with Sir James Paget, occupying the dorsal and cervical regions. It was not sufficiently large to obstruct delivery. The child was now living, and the mass shrivelled.

A BRIEF DESCRIPTION OF A SERIES OF CASTS, SHOWING THE CONDITION OF THE UTERUS AT VARIOUS PERIODS AFTER LABOUR, VARYING FROM THE TIME OF DELIVERY TO FIFTEEN DAYS AFTER THAT EVENT.

PRESENTED TO THE OBSTETRICAL SOCIETY

By ARTHUR FARRE, M.D., F.R.S.
HONORARY PRESIDENT OF THE SOCIETY.

THE Society having done me the honour to signify its acceptance of the collection of anatomical casts which I have offered to present to their museum, I desire to commence by placing upon the table to-night the first portion of that collection. It consists of ten casts, taken from nature, and showing with great fidelity the state of the uterus at various dates after labour, the colouring serving to convey an accurate notion of the appearance of the parts in their recent state. I will only add here, that the names by which the several cases are designated, such as metro-peritonitis, are not my own, but those which I found attached to the specimens when they came into my possession.

The series commences with

No. 1, representing the interior of the uterus in a woman who died during labour. The cause of death is not stated. In all probability it was hæmorrhage. The soft flabby condition of a non-contractile uterus, and the deep staining of the substance and interior of the uterus, as well as of the vagina, saturated with blood, are shown with wonderful fidelity in this specimen.

No. 2 gives an *external* view of the uterus in a case where death took place twenty-fours after delivery, at the eighth month of gestation. The cause is stated to have been metro-peritonitis, but the whole aspect of the organ conveys a suspicion that here also hæmorrhage may have played a part. This specimen is rendered further interesting when compared with the next, viz.,

No. 3, which represents the interior of the same uterus. The condition of the organ at the seat of detachment of the placenta retaining its natural state, the marked difference and separation between the cavity of the uterus and that of the cervix, showing two perfectly distinct parts with a broad line of demarcation between them, and the cervix still retaining its characteristic rugæ, will prove interesting to those, if there are any, who may still entertain the belief that the cervical cavity becomes expanded during the latter months of gestation, and forms an integral portion of the cavity of the uterine body.

No. 4 represents the external condition of a uterus two days after delivery at full term. The process of involution has evidently here been retarded; in fact, does not appear to have commenced. A uterus remaining of this size after delivery, would evidently have reached to near the umbilicus. The os uteri is wide and gaping, and the swollen and dusky coloured lips are everted. The condition of the uterine appendages in this, and the two following casts, is exceedingly well shown.

No. 5 exhibits the condition of the uterus at a somewhat later period. Here the cause of death was metro-peritonitis. I am not able to fix the exact date, but it was

probably intermediate between the last case and that which follows, viz.:

No. 6, showing also the *external* condition of the organ, where death took place from a similar cause, eleven days after labour. This and the following example,

No. 7, must be taken together. The one shows the external and the other the internal state of the same uterus. Both are interesting as exemplifying many physiological and anatomical facts, more especially the state of involution of the organ at that date after parturition, and the retention of the placental site distinct, as well as the distinction between the cavities of the body and cervix uteri. In all these respects this preparation, and No. 3, may well be studied together, with great profit and advantage, as it appears to me.

No. 8 carries to a later date. Here death took place from uterine phlebitis, on the *fifteenth* day after parturition. The uterine veins and sinuses, as they traverse the substance of the uterus, appear to be filled with purulent matter.

The next preparation, No. 9, will possibly, in reference to the discussion which has recently taken place on puerperal fever, prove the most interesting of the entire series. I purposely refrain from making many remarks upon it. Of the history of the case I can learn nothing, beyond the fact that death took place several days after labour. But the absence of a history is of little consequence, since every one can interpret the appearances for himself, according to his own view. The cast shows the interior of the uterus, so displayed as to show the site of the placental insertion. Here the whole placental area is seen of a deep purplish-red colour; numerous apertures with ragged edges are shown; they are apparently the mouths, and probably the cavities of the uterine sinuses, laid open perhaps by sloughing. They are filled with an abundance of dirty pus. Those who, like myself, believe in the frequent autogenetic character of the diseases which we have recently been discussing, will find abundant mate-

rial for thought and reflection, in this most interesting preparation. Nor will it escape attention, that the matter lying so freely on the inner surface of the uterus has already apparently made its way into those sinuses and veins which occupy the walls of the organ.

No. 10 constitutes the last of the series. Its chief point of interest is the abundant flaky deposit of lymph upon the exterior of the uterus, death having occurred fifteen days after labour from metro-peritonitis.

With this specimen I close the present series, which perhaps will be found to constitute the most interesting part of that collection, which I purpose placing in the possession of this Society. But it is only a portion, and, in regard to numbers, only a small portion of the entire collection, which I have offered. The remainder serves to represent, with equal fidelity, numerous interesting facts relating to the morbid anatomy of the unimpregnated uterus, as well as peculiarities of its formation; also the varieties of the placenta, and various malformations of the fœtus. I only await an intimation from the Society that they are ready to receive them, and I can only further express my regret if, with the teachings that they are capable of conveying, they should much longer remain in the hands of one individual.

Dr. GRAILY HEWITT moved that a cordial vote of thanks be given to Dr. Arthur Farre for his valuable donation to the Society. It was rare for such a gift to be presented to a Society, and the intimation Dr. Farre had given that he would from time to time, as he could prepare the notes, present the remainder of his collection to the Society was as welcome as it was generous.

Dr. MURRAY gladly seconded the resolution, and expressed the hope that the Society being in so prosperous a condition would soon have more room to receive Dr. Farre's handsome gift.

The resolution was carried unanimously.

A REPORT ON CERTAIN CAUSES OF DEATH IN EWES DURING AND AFTER PARTURITION, WITH NOTES ON THE "NAVEL-ILL" IN LAMBS.

By JONATHAN HUTCHINSON, F.R.C.S.
SENIOR SURGEON TO THE LONDON HOSPITAL.

DURING the winter months of 1872 and 1873 I had a flock of seventy West-down ewes, which lambed during January and February. The weather was cold, but they were well protected in a large straw yard. The following is a list of our losses arranged in the order in which they occurred.

No. 1. Died a week or two after lambing, having borne two healthy lambs. The illness was obscure, and I had no opportunity of personal observation, nor was a post-mortem made. I will not, therefore, trouble the Society with any details.

No. 2. Dropped a dead and decomposed lamb, being at the time somewhat ailing. She died four days later with metritis and portions of retained placenta, and with pyæmic deposits in the lungs.

No. 3. Had a long and difficult delivery, the lambs being crossed. The hand was used to assist her, and she died a few hours afterwards. The right horn of the uterus showed a large ragged laceration, and at the fundus of the organ was another black and almost gangrenous patch. There was but little blood in the peritoneum, and no evidence of fibrinous effusion. The viscera were sound. The laceration in the uterus appeared to have been preceded by softening of an almost gangrenous character. The lambs had been dead for some time, and were softened and decomposing.

No. 4. Was a case of difficult and protracted labour. The vagina was narrow, and the shepherd failed in his attempts

to effect delivery. The ewe died undelivered; the lambs, which were malplaced, having been dead some time previously. No injury had been inflicted on the vagina or uterus.

No. 5. Died unexpectedly one month after lambing. She was found dead on her back, having the night before seemed quite well. This might possibly have been a case of "rig-welting." The post mortem showed no disease to account for death, but the kidneys were soft and pulpy, and the cellular tissue around them blood-stained as if from bruising.

No. 6. Was a case of death on the fifth day from metritis and pyæmia. The uterus was almost gangrenous, and there was peritonitis of the adjacent parts. A portion of placenta had been retained. There were pyæmic deposits in the lungs.

No. 7. Death before delivery from rupture of the vagina and escape of a loop of intestine. The accoucheur did not admit having attempted to introduce the hand.

No. 8. This ewe died undelivered after a week's illness. She began by appearing to be dull and feeble. There were no signs of labour until the day before her death, when the waters presented and broke. At the autopsy the uterus was found to be so matted to the abdominal wall that it was difficult to separate them. Masses of lymph formation an inch thick, and looking almost like custard, lay between the peritoneal layers. The walls of the uterus in parts were discoloured and almost gangrenous. The peritonitis was clearly secondary to the metritis, for the intestines and stomachs which were pushed upwards were scarcely affected by it, being almost wholly free from adhesions. In the uterus were two full-grown lambs. Their tissues were sodden, and they had evidently been dead for a week or more. The placenta and membranes were beginning to decompose. The os was dilated and the vagina roomy, and one lamb was presenting naturally. There were no pyæmic deposits. There can, I think, be little doubt that in this instance death of the lambs from

some unknown cause was the starting-point of the mischief. Then followed the metritis and next the peritonitis. There was no reason to suspect any kind of infection. The ewe's illness began a week before parturition, when she was about in the field. The case illustrates, as do several others, the proneness of the uterus to take on gangrenous inflammation when containing dead material.

No. 9. Was an instance of death from acute bronchitis of two days duration six weeks after lambing. I have full notes of the illness and post-mortem, the latter done by Mr. Nettleship ; but as it is not specially connected with parturition I forebear to quote them.

It will be seen that during this year my mortality reached the high average of nearly 12 per cent. Yet we had no epidemic and nothing in the season specially prejudicial. The deaths were from very various causes. We may put aside Nos. 5 and 9 as having had nothing to do with parturition, and case 1, as having not been diagnosed. Of the remaining 6 two died during delivery, one with vaginal injury, and the other from exhaustion, delivery being impracticable; neither having any inflammation. This leaves 4 in which inflammatory changes ensued, and in all of these metritis from decomposing placenta was the first change. In one the almost gangrenous organ had ruptured, in another there was extensive and severe pelvic peritonitis, and in the remaining 2 in addition to metritis and peritonitis there were evidences of pyæmia. In most of these latter cases the lambs had been dead some time. Difficulty in the process of parturition then appears to have been this winter the primary cause of loss. Consequent on it, death of lambs in the uterus was liable to happen, and as a sequence of this came metritis and other inflammatory changes. The suspicion arises that this high ratio of difficult labours may have been incidental to the breed, and to the attempt to obtain large animals. The Westdown sheep is a cross between the Leicester and Southdown, and is much larger than the latter. It may be that the average lamb is out of proportion to the vagina. It

seems, however, highly probable that some other cause of death of lambs was at work, for in several instances the death occurred without any signs of labour being present.

During the next spring (1874) I had 40 ewes of the same breed (not the same animals). Of these 8 proved barren, 2 lost their lambs, and 2 died. The remaining 28 reared 34 lambs. No death occurred this year in direct connexion with parturition.

One ewe (No. 11) died after an illness of three days before labour commenced. Her lambs were living and active up to the day before her death. She had seemed weak, and during the last day had lain on her side with her head bent back (? tetanic) (I did not myself see her). After death the only post mortem condition of importance found was universal hepatisation of both lungs. This was almost literally universal, and the lung substance could hardly be distinguished from liver. This must I suppose rank as a death from double pneumonia.

A second ewe died several weeks after lambing from septicæmia consequent on gangrenous inflammation of the udder. The shepherd drew my attention to the fact that the udder was swollen and hard. I found it very large, dusky, and with fluctuation in one part. A free incision was made, and a quantity of thin gruel-like pus with flakes of milk was let out. The inflammation spread to the cellular tissue of the abdominal wall, and on the next day death took place. At the time I made the incision the shepherd remarked that he had never known recovery from a state like that. The condition is known as "black udder." It is evidently inflammation of the breast gland in the first instance, the peculiarity in the sheep being that instead of the process ending in the formation of circumscribed abscess it becomes diffused and rapidly runs on towards gangrene. The animal usually dies either of shock or of septicæmia before absolute sphacelus is produced. Two or three days are, I believe, the usual limit of the illness. When a student I saw and dissected several such cases, and they occur, I believe, in the cow as well as the

ewe. It may be that the depending position of the udder in these animals aggravates the inflammatory process, but no one can believe that this is all. The rapid manner in which all the adjacent tissues become blood-stained and livid is quite peculiar to the lower animals. I have in women seen very severe examples of mammary inflammation, and one at least which threatened to end fatally from excessive constitutional disturbance. I never, however, saw or heard of one which really ended in death at this stage.

My flock in 1874 and 1875 consisted of 50 horned Dorset ewes to lamb in October and November. We did not lose any from causes connected with parturition.

During the past winter 1875 and 1876 I have had many deaths, and have to record some very interesting facts respecting them. We bought in November 100 horned Dorsets to lamb at once, but the lambing season as it turned out was protracted over three months. The season was bad both as regards wet and cold.

The first death occurred on November 13th, three days after delivery. The uterus was swollen, soddened, and discoloured; portions of its peritoneal surface were greenish and showed shreds of lymph, but there was no general peritonitis. The uterus contained a dirty grumous fluid, but there were no portions of placental structure of any material size. All the other viscera were healthy excepting that the left lung was everywhere adherent, but the adhesions were certainly not recent.

Here, then, we have proof of a fatal metritis immediately after delivery without obvious cause, occurring under circumstances which put the risk of contagion almost entirely aside. It was the first death of the season, and the animal had been delivered in an open shed.

On November 15th another ewe died, as was reported with precisely similar symptoms, but it was not practicable to make a post mortem. About the same time another ewe was ill with a dirty discharge from the vagina, but after a fortnight's illness she recovered.

We have now to enter upon a wholly different type of disease.

On November 19th two ewes were reported to be ill. When I saw them on Saturday the 20th one was evidently very ill. Her flanks projected as if blown up, the right side being especially conspicuous. The shepherd wanted me to puncture the flank, but I could not make out that there was any fluid. The swelling seemed rather to be caused by retraction of the abdomen. This ewe had lambed about nine days ago, and her milk still flowed fairly. We noticed that she had a little yellow purulent discharge from the vagina. She was in the open field, and the weather was slightly frosty. At this time she could walk about, but she had a heavy dazed look about the eyes. During the course of the day she became rapidly worse, and in the evening was thought to be dead. During the whole of the night she lay on her side quite rigid, and excepting respiration quite motionless. If she had been made of wood or well frozen she could not have been more stiff. Her limbs, back, neck, and jaw were all equally rigid. By taking hold of one leg you might lift her body and turn her so as to make her rest on the rump and back of head. There was no great opisthotonos; it was simply absolute rigidity with the neck moderately bent backwards. The jaws could not be opened excepting by force which seemed likely to break them. On Sunday evening, as she had been for twenty-four hours in this condition and there seemed no probability that she would improve, I had her killed in order that I might make the post-mortem before returning to town. As regards its details I may briefly say that we found nothing. The viscera were all quite healthy, including the uterus, which was contracted, and did not show a trace of inflammation. The udder was full of milk, and although a small quantity of puro-mucus was found in the vagina there was nothing of any moment. I did not in this instance examine the spinal cord and brain, but as in subsequent quite similar cases I repeatedly did so I think we may safely assume that they would have presented no morbid conditions.

The other ewe which has been mentioned as having

sickened on the same day as the one just referred to, was one which had lambed the first in the flock, had lost her lamb, and had since seemed perfectly well. She was in excellent condition and the udder quite dry. On the Saturday morning the men noticed that she staggered and looked what they called "fitty." I could see nothing amiss with her excepting, perhaps, that her eyes looked a little dull, but if driven she reeled a little in her gait, her pupils acted well and she still ate freely. Next morning, however, she was worse, could not use her limbs and lay sprawling in any position in which she was put. Her jaws were however, still not fixed and she could eat. On the Monday morning (third day of the illness) she was worse and in much the same condition as I have described in the preceding case, with the exception that her jaw was not nearly so stiff. Her neck was thrown back just as in the other case, and when placed on her back she rested on the back of head and rump. With a little force, however, her jaws might be opened and if food were put into her mouth she could masticate and swallow it. Although thus apparently about to die on the Monday she yet lived on till the Friday evening, the men being very attentive to feeding her. She appeared to die from inanition, for the quantity of food taken had been but small. The post-mortem was made on Sunday, November 29th, about thirty hours after death. The tissues were already although the weather was cold, much softened and discoloured. No special morbid conditions were found, the uterus was quite healthy, the liver and kidneys shared with the other tissues in softness, but showed no disease. The brain and cord were carefully examined and were quite healthy.

Thus, then, we have two deaths at periods respectively of ten days and nearly a fortnight after lambing, with similar symptoms, and in each instance without uterine lesions, whilst in each the disease appeared to be a form of tetanus. I shall have at a subsequent part of the paper to mention a number of similar cases and also to assign both cause and cure. As I wish, however, to still observe chronolo-

gical order in my narration, I must for a little space leave this subject to relate a case of death in connection with the labour process.

On Sunday, November 21st, an ewe showed her first symptom of labour in a considerable prolapse of the rectum. Although repeatedly reduced, the prolapse continued to recur on Monday, and the men then, according to custom, stitched up the anus. On Tuesday the stitches were cut, and the prolapse never recurred. On Wednesday she was so much exhausted that it was necessary to interfere, and with much difficulty a very large lamb, which had apparently been dead a week, was taken away. It was quite rotten. The mother was very ill at the time, and died the next day. I found at the autopsy the vagina much bruised and its mucous membrane lacerated. It was, indeed, almost gangrenous. In the upper part lay a second dead lamb, a small one and partially decomposed. It had probably been dead ten days or a fortnight. The placenta of the first was still retained. The uterus did not show any material signs of inflammation; its interior was almost dry and its walls thin and of a livid colour; on its peritoneal aspect were a few flakes of lymph, and half a pint or more of dirty blood-stained fluid was in the peritoneal cavity. There were no evidences of peritonitis excepting in the neighbourhood of the uterus. The lungs were almost everywhere solid and liver-like. There were no deposits in them and no pleuritis.

In this case there is little doubt that death of the lambs at separate periods occurred before parturition commenced, and that metritic peritonitis was the cause of death, helped, probably, by the introduction of the hand, &c., to procure delivery.

On December 5th another ewe was reported "stiff." She had lambed two weeks before, but had never seemed quite well afterwards. Her own lamb was dead-born, and attempts were made to get her to adopt another. With this object she was kept in a hurdle shed from the time of her lambing until she sickened with tetanus. I mention

this fact in order to make it clear that the latter was not produced by exposure to cold. I need not again describe the tetanic symptoms, but may say that this sheep was just like the two others, excepting that she had in addition spasms when touched. These spasms were not very severe, but they were constantly produced by touching her.

In this case the tetanic condition continued for several days before death occurred. A careful post-mortem, including the brain and spinal cord, disclosed nothing.

About this time several other sheep began to present similar symptoms. Some after having seemed likely to sicken rallied again and got well, but others passed into conditions very similar to those described. I now began the administration of opium in full doses, and for some time it appeared to be able to control the conditions, even when most severe, and we had no more deaths. The dose given was eight grains of powdered opium in a little gruel, and this was repeated every three hours if necessary.

On December 7th my bailiff reported that he had cured three with the opium, but had lost one, which, indeed, had died so quickly that no medicine could be given. It was only noticed for the first time to be ill when the shepherd visited them at six in the morning, and at eight it was dead. This ewe had only lambed a few days and had never left the shed, so that the malady could not be attributed to cold. She died quite rigid, and with the jaws firmly closed. This case, in which the illness was certainly not more than twelve hours, was the shortest that we had.

On January 1st another ewe died very shortly after delivery by the hand. She had twin lambs, one of which lived almost to delivery, whilst the other had been dead some time and was decomposed. No post-mortem.

I must now conclude my account of the tetanus epidemic. During January we still continued to have many ill. In most the opiate treatment succeeded like a charm, but still a few died. In one case, an ewe which was lying quite stiff, and with the jaws so closed that it was only

with the utmost force that they were got open to give the medicine, was walking about and calling for her lamb within an hour or two of the second dose. We did not now lose any excepting those which died very quickly; if the disease was protracted the opium cured it. The number of cases, however, still increased. I was exceedingly puzzled to assign any cause for this malady. None of the flocks of the farmers in the neighbourhood were suffering, nor could I gain any information about it from my friends or from books. It is a well-recognised fact that sheep and other ruminants, are very liable to tetanus, but no one has, I believe, recorded any statements bearing upon the special liability of the post-puerperal state. It was impossible to blame the cold, for the cases had been equally numerous during some very warm weather, nor even during the cold had the sheep endured any exposure. They had been most carefully attended to both as regards housing and food. It is to be added that we had tried repeated changes of field and had divided them into two flocks, keeping one a quarter of a mile apart from the other, but with the result that the cases still occurred alike in both. At length in the last week of January we determined to make a change in the kind of cake they were having. In the beginning of the winter they had had a mixture of linseed cake and cotton-seed cake, but latterly they had had cotton-cake alone. The cases had increased since the linseed cake had been finished. The result was that after finally forbidding the cotton-cake no more cases of tetanus occurred. There can, I think, be no reasonable doubt that it was the cause, for up to the time of its abandonment they were increasing in frequency, with its disuse they ceased. I fear that some members of our Society may complain that I have troubled them with a long account of a malady which, after all, turns out to be not a puerperal one.

It is, however, to be remembered that, although it is true that the immediate and chief cause seemed to be the cake, yet none were attacked excepting those which had

lambed. None of the lambs, although they ate the cake freely, ever suffered, nor did any of the ewes before lambing, nor any of those which were not in lamb. Thus it seemed certain that there was something either in the fact of recent delivery, or in the lactation state, which materially predisposed to it. This may probably in part be explained by recollecting that those ewes which were giving milk would be the most likely to eat freely of the cake. The cake was a very good one, and is considered equal in all respects to linseed, and the rest of the farm stock, steers, calves, &c., as well as the lambs, were doing well upon it.

After I had given it up I learnt from several farming friends that they considered it a doubtful food for ewes, but I have not yet learned from any source that it has been considered chargeable with producing tetanus. I do not wish to trouble the Society with any merely agricultural details, and must therefore be content to ask attention to the remarkable fact which this series of cases seems to illustrate—*that it is possible, by an article of food not in itself actually poisonous, to predispose so efficiently to so peculiar a form of nerve disorder.* It seemed clear that it was not poisoning in the more direct and ordinary sense of the term; that is, it probably did not depend upon any accidental ingredient present in some parts and not in others. Had it been analogous to strychnia poisoning for instance, it is probable that if the animal lived on for a few days after the beginning of symptoms and after ceasing to take the cake, recovery would have ensued. But this was not the case, for in all instances in which the disease became severe, unless opium was given the animal died, whilst in some the illness was protracted over a week. From first to last I do not think that less than thirty out of the flock suffered, and of these eight or nine died. Although all books on the diseases of sheep acknowledge that they are very liable to tetanus, yet I cannot learn from private inquiry that it is at all frequent. A gentleman who has been a considerable sheep-breeder the last twenty-five years

tells me that he has never seen but one sheep with "locked jaw," and that was after an operation. I have myself seen it once in a goat after an injury to the foot. It is to be observed that, in the series which I have described, the general tetanic symptoms were never absent, whilst in several cases the local ones of trismus were comparatively slight. So also the tendency to spasm was but rarely present, and was never so well marked as it often is in the human subject. That there was no organic disease was proved not only by the negative results of the post-mortem examinations, but by the remarkable manner in which some of the worst cases recovered in a few hours under the use of opium. I do not know that any of those which had once recovered relapsed, but this is not certain.

I wish next to ask the Society's attention for a few minutes to a peculiar disease to which young lambs are liable. I do not desire to say anything on the causes of death generally, although there are many interesting points which might be mentioned, but for this evening it may perhaps be better to keep to one only.

Shepherds are well aware that lambs are liable to suffer from what they call "navel-ill," and some veterinary works, Mr. Gamgee's for instance, mention pyæmia as an occasional result of inflammation of the funis. Mr. Gamgee suggests that it may perhaps be caused sometimes by the practice of wrapping a lamb in the skin of one which has died in order to induce the mother to replace her loss by a foster-child. My experience this spring has, I am sorry to say, demonstrated in the strongest possible manner that no such contamination is needed in order to produce purulent inflammation of the funis and pyæmic hepatitis. I have lost at least a dozen lambs from this cause, and in none of them can I suggest any possible source of local poisoning. In none of them had the practice adverted to been employed, and in only a few had the funis been in anyway touched by the hand of the shepherd. In many cases, in the ewe, the umbilical cord is torn across after delivery by the mother's rising, and then I believe it usually

breaks about four or five inches from the lamb's body. In other cases the ewe bites it across, and in some instances, even after it is torn, the ewe, after licking her lamb, will proceed to nibble off the funis close. If the shepherd is near at the time of the lamb's birth he usually cuts the cord with his knife, leaving about four inches attached. Under no circumstances is any ligature applied, and external hæmorrhage is, I believe, unknown. Shepherds have a prejudice as to the ewe's biting the cord too close, and think that the navel is more liable to inflame when this is done.

The first case of navel-ill was one in which this had happened. The cord had been bitten close, and the parts about the umbilicus were swollen and discoloured. The lamb died at about a week old. I found the cellular tissue of the abdominal wall infiltrated with blood-stained serum, and the appearances suggested that there might have been some hæmorrhage, although not much. On seeking the hypogastric arteries I found to my astonishment that their ends had retracted far within the abdominal cavity, and lay close by the sides of the bladder. They were completely sealed and there was no blood-clot about them, though the cellular tissue was stained. My impression at the time was that this lamb must have died from the too-close biting of the cord, the great retraction of the arteries, and bleeding into the cellular tissue. Subsequent dissections, however, showed that this condition of retracted arteries was the natural one, and I found them in precisely the same position and condition in cases where two or three inches of shrivelled funis still hung at the lamb's navel. These later *post-mortems* showed me that in most instances there was no indication of any hæmorrhage whatever, and the almost invariable presence of pyæmic deposits in the liver revealed the true nature of the disease, and led to an examination of the umbilical veins. In several I was able to demonstrate that this vein contained pus, and in one it was dilated into a sort of abscess cavity. In others, although the deposits in the liver were just as definite, I was not able to prove phlebitis at the navel. The deposits

in the liver were always multiple, and usually placed abundantly on its surface. Sometimes they were abruptly limited to the left lobe—a condition to be explained no doubt by the anatomical distribution of the vein implicated.

In some cases there was inflammation over the surface of the liver, or even general peritonitis, and in one or two pleurisy, pneumonia, and joint complications were present. Thus there could be no sort of doubt as to the nature of the malady, and there could be equally little that it originated in connection with the umbilical vein. No such condition has been observed, I believe, in the human subject, nor am I aware that it has been described in any other of the lower animals.

It will be seen that the anatomical relations of the contaminating veins are different from what is usual in man in most cases of pyæmia since the vein breaks up into smaller branches before communicating with the general circulation. Thus, the liver is almost certain to suffer first and very severely, since its capillaries will serve as a sort of filter to detain the infecting material. It is only when in the human subject some part of the portal vein system is implicated that the conditions are parallel.

In this circumstance we have no doubt an explanation both of the severity with which the liver usually suffered, and of the fact that it was usually the only viscus affected.

As to the causes which induce the phlebitis I can scarcely offer any conjecture. I am not aware that I have lost any lambs from it until this winter, and there have been really no unusual conditions in their management which can be mentioned. It happened to vigorous lambs as well as to weakly ones, and to those in which the funis was left long as well as to those in which it was bitten off close. The external evidence of inflammation of the navel was often very slight, and in some wholly absent. In some instances the lambs lived for a fortnight, but in most death took place within the week.

On Sunday, November 29th, I had four lambs on the table

at once all presenting similar conditions; two of them were very fine ones and had not seemed to be ill till a day or two before they died. The weather during the preceding fortnight had been cold, but not remarkably wet. It is difficult not to suspect that some source of contagion may have been present, but it is equally difficult to form any plausible conjecture as to what it could have been. It is to be kept in mind that this little epidemic of navel-ill occurred whilst the ewes were suffering from tetanus, and when we had scarcely any cases of metritis up to the navel.

Before concluding a paper which has I fear been found rather tediously matter-of-fact it may perhaps be convenient to point out what seem to be the special features of interest. These may be enumerated as follows:

1st. It seems clear that the death of the fœtus before delivery, is a far more serious occurrence in sheep than in the human subject, and also that it is far from an unfrequent one. The lamb after death appears to become not unfrequently a cause of metritis, and there seems to be but little tendency to its expulsion.

2nd. When metritis occurs in the ewe, whether from a retained dead lamb, a retained portion of placenta, or simply as the sequence of parturition, it is apt to run a rapid course. The tissues of the organ soon become infiltrated and sodden, and there is a tendency to gangrene during which rupture of the walls may take place.

3rd. In connection with uterine inflammation, whether after delivery or after death of the fœtus, peritonitis and pyæmia will not unfrequently occur.

4th. There appears but little reason, so far as my experience has gone, to believe that puerperal metritis and peritonitis, or the consequent pyæmia, are other than "accidents." In all cases that have come under my observation I believe that the disease was self-developed. We never once had reason to suspect contagion.

5th. It is conclusively proved that puerperal peritonitis

and pyæmia may occur in animals treated in the open air, and yet run a course almost precisely similar to the parallel maladies in the human subject.

6th. We have seen that ewes, whilst giving milk, may be made liable by an improper article of food, to a sort of idiopathic tetanus; and further that the same article of food shows no tendency to produce it in lambs, hoggets, and undelivered ewes.

7th. Lastly, we have seen that young lambs are liable, quite independently of any known source of contamination, to the occurrence of purulent phlebitis of the umbilical vein with the consequent phenomena of pyæmia. The strong support which this last fact gives to what I believe to be the true hypothesis of all pyæmia, strictly so called, is so far as I am myself concerned an abundant reward for the trouble which has attended the collection of the facts detailed. I can only hope that the Fellows of the Obstetrical Society may have found in this or other parts of my narrative that which may seem in some measure to justify me in having brought it under their notice.

Dr. Cooper Rose stated that, although he was very ignorant on the subject of diseases of animals, he should like to make an observation on one of the points mentioned in Mr. Hutchinson's most interesting and valuable paper. He referred to the salutary effects of opium in subduing pain and spasm in sheep. He remembered in the year 1853 he paid a visit to a friend in the neighbourhood of Diss during the lambing season. He found that many ewes had died *after* lambing from what was called "*straining*." He advised the administration of ʒij of laudanum in warm gruel every two hours, which had the effect of entirely curing the disease, and not only his friend but also his neighbours to whom he communicated the advice saved, with one exception, all the sheep which were subsequently attacked. He believed *straining* to be analogous to *after-pains*, which if neglected led in the sheep to metritis, exhaustion, and death. In order to eliminate all sources of infection Dr. Rose asked Mr. Hutchinson whether the land had been manured by sewage or artificial manures.

Mr. Hutchinson replied that only artificial manure had been employed.

Dr. PLAYFAIR said that it would be impossible to over-estimate the value of such a paper; and were Mr. Hutchinson's example followed, and epidemics in the lower animals carefully studied, there could be no doubt that much light would be thrown on diseases in the human race. It would be, of course, impossible to criticise such a paper without a much more careful study than was possible after merely hearing it read. It seemed to him, however, that, *primâ facie*, Mr. Hutchinson's conclusion that contagion had nothing to do with the disease seemed hardly justified, and he would like to ask him if he had really eliminated the possibility of the disease having been conveyed to the affected ewes. There were many points in the story narrated that forcibly reminded him of the epidemics of puerperal fever, occasionally occurring in limited localities or in the practice of one man. Putting aside the tetanic cases, here we had three successive epidemics of puerperal septicæmia in the flocks of one gentleman, while the flocks of his neighbours were never affected. Was there no local condition to account for the limitation to Mr. Hutchinson's flock? The first case of all was clearly a case of autogenetic septicæmia, as a piece of placenta was found in utero. Was it not possible that the epidemic was started by this case, and conveyed to the other ewes by the shepherd, or in some other way? Again, was it certain that Mr. Hutchinson's own zeal for pathology (which was so great that on one occasion he sacrificed a sheep in order to make a post-mortem before he went to town) had nothing to do with the misfortunes of his flock? Did not the shepherd assist him in his autopsies? and if so, must not his hands have been impregnated with the cadaveric poison? In that case the epidemic might have arisen from causes similar to that in his Vienna Lying-in Hospital, the origin of which was detected by Jenner and Weiss. These questions seemed to him of great importance, and if it could be proved that puerperal septicæmia could arise in the lower animals, from contact with septic materials, a very interesting point of similarity to the disease in the human subject would have been established.

Dr. SNOW BECK remarked that the facts he was enabled to give would perhaps be the best answer to the pathology of Dr. Playfair. He was one of those who believed that the period of pregnancy and the process of parturition was a natural and physiological function in the female of all animals, and that if this view was correct the diseases which followed parturition in the lower animals ought to assimilate, if not to be identical, with those diseases which caused the death of many women soon after their confinements. With the view of practically determining this question, he had obtained the uteri of several sheep, a few years ago, which had been ill soon after lambing, and had been killed in consequence. At first consider-

able difficulty was experienced in obtaining any information on the subject, from the fact that as soon as the ewes showed symptoms of illness they were sold to certain butchers at a greatly reduced price, were slaughtered by them in the usual way, and the meat sold. This practice was, as might be expected, kept as secret as possible, but after a time he procured as many uteri as he pleased, which all showed essentially the same facts. These uteri were taken from ewes kept in the healthy counties of Leicestershire and Warwickshire, out of different flocks, some being a few miles from each other, and looked after by different shepherds, having no communication with each other, directly or indirectly, during the lambing season. They were thus not exposed to any "unhygienic" influences; nor was there the slightest reason to suppose that contagion had been conveyed from one flock to the other. He thought it might be interesting to the Fellows to examine for themselves the condition of the uteri. One of those on the table had not been opened or interfered with in any way, and was at the disposal of any one who chose to examine it; the other had been opened and washed by a stream of cold water, but nothing further had been done beyond tying some of the divided veins or sinuses in the line of the incisions. All the uteri obtained presented precisely the same general features, and had been examined, according to his usual custom, under water. Taking the opened uterus as an example, it was large, flabby, and uncontracted, but otherwise all the tissues were perfectly healthy. He had not been able to detect any appearance of inflammation on the peritoneum or elsewhere, or any thickening or deposit of any kind to indicate the previous presence of any inflammatory action. Nor were there any coagula, or remains of any coagula in the veins, such as had been stated to be present in the uterine sinuses after parturition. When the uterus was opened the inner surface was covered by a copious dark, reddish-yellow, purulent-looking fluid, which was washed away by a stream of water. The inner surface was then seen to be flocculent or shaggy as is usual. Evidently, however, there was no distinct mucous membrane at this part, although the entire substance of the organ might be described, in figurative language, as a thick mucous membrane. At the inner surface it consisted chiefly of fibrillar cellular tissue mixed with some muscular or contractile tissue; the middle portion was composed of about equal proportions of fibrillar cellular tissue and contractile tissue, whilst the outer portion was composed almost entirely of muscular or contractile tissue. But the whole thickness was composed of these two tissues, combined in varying proportions, and might be said, in figurative language, to be only a thick mucous membrane containing a large amount of muscular or contractile tissue, with the usual blood-vessels, nerves, absorbents, &c. At each side of the uterus some of the

veins were found filled with a dirty reddish-yellow coloured fluid identical in colour and appearance to the secretion found at the inner surface of the organ; but the coats of the veins themselves were clear, semi-translucent, without any injection or deposits of any kind to indicate that they had been inflamed. They were in fact perfectly healthy. After tying the orifices of the divided veins in the line of the incision, air was blown into these veins, which traversed the sinuses in the walls of the organ and escaped by openings previously concealed by the shaggy inner surface, at the point where the cotyledons of the placenta had been situated. With these facts it appears impossible to withhold the conclusion that the fluid in these healthy veins had been taken up from the inner surface at the openings previously concealed by the shaggy tissue, and passing through the uterine veins, by reason of the flabby uncontracted condition of the walls of this organ, and had been conveyed into the general circulation, and had caused the disease which existed. In this respect the condition of the uterus in the ewe was identical with that in the human female after septicæmia following a miscarriage or parturition at the first period; but in the ewe the further changes which generally followed were not observed; probably because the animal had been killed at an early stage of the affection. This conclusion was rendered more probable from the facts recorded by Mr. Hutchinson, in his very interesting and valuable paper. In only one case had he seen the carcase of an ewe which had died after being left for some short time. Here the abdomen was much distended, the intestines filled with air, much serum existed in the peritoneal cavity, much flocculent soft lymph floating in the serum, and was deposited in the uterus and intestines. The amount of purulent-looking fluid contained in the healthy veins would also account for the very fatal character of these affections. For unless it encountered some blood in which it could induce coagulation, there was nothing to impede its onward progress, and it must enter the general circulation. Nor was there any means by which this fluid could be abstracted from the veins; nor any remedies yet known by which its deleterious effects upon the system could be counteracted or annulled. He had also seen two or three of the ewes which were ill after lambing, and from this, aided by the accounts received from the different shepherds, it would appear that the more obvious symptoms were, a day or two after the lambing the ewe appeared very weak, had a dazed languid look about the eyes; was constantly lying down; when forced to rise, or when lifted up, staggered a yard or two, then lay down again; ate very little; had a great discharge of offensive matter from the genitals; after a time the abdomen began to swell, the animal became gradually weaker and weaker, and finally appeared to die exhausted. Mr.

Hutchinson had spoken of signs of metro-peritonitis being found in the examination after death in some of the ewes, and appeared to consider that it was sufficient to find some soft lymph upon the peritoneal surface to justify this conclusion. But this was only repeating a not unfrequent fallacy with respect to this subject. The presence solely of soft friable lymph, even accompanied with some fluid and moveable blood in the neighbouring vessels, is not supposed to diagnose the previous existence of metro-peritonitis; whilst it is well known that these morbid signs almost always result from the septicæmic condition, where it has continued for a short time previous to the death.

Dr. WILTSHIRE said, while Mr. Hutchinson's paper was being read it struck him that there might, perhaps, be something poisonous in the pastures in which the ewes were grazing; and it was therefore with great interest that he heard him attribute the mortality among his lambing ewes to the use of cotton cake. In America, and especially, he believed, among negresses, cotton root is used as an abortifacient. The symptoms were markedly tetanic. Was there any elevation of temperature? Was the saliva of the mother poisonous through nibbling the umbilicus of the lamb in the disease called "navel-ill," as it was in hydrophobia?

Dr. AVELING thought Mr. Hutchinson's paper very valuable. He would remind the Fellows that Harvey, the father of British obstetrics, gained a great deal of his obstetric knowledge from the numerous and accurate observations he made upon generation and parturition in the deer. He thought our knowledge might be extended by studying the parturient processes, puerperal disorders, and diseases of the female generative organs in animals.

The PRESIDENT inquired whether the young lambs suffering from navel-ill belonged to the ewes affected with tetanus, and whether the lambs themselves showed any symptoms of tetanus. Dr. Osborne and Dr. Bland had contributed valuable information to the subject of the diseases and complaint of the lower animals from parturition.

Dr. GRAILY HEWITT would make a remark on one single point in Mr. Hutchinson's valuable paper. The "navel-ill" had been referred to. Now, this disease was quite well known to obstetric practitioners as one sometimes witnessed in the human infant. It had even, he believed, formed the subject of a paper published in Paris some years ago. At all events he had seen instances of it in the British Lying-in Hospital when physician there some years ago; and his own observations enabled him to say that this pyæmic condition of the navel witnessed in such cases was associated with symptoms of disease of the liver, the most marked of them being jaundice. There was, therefore, an apparent complete resemblance in the disease of the navel described by Mr.

Hutchinson as witnessed in lambs and that observed in the infant.

Mr. HUTCHINSON inquired whether the patients generally recovered when jaundice was marked, or whether they ended fatally with symptoms of pyæmia?

Dr. EDIS thought that in the first year's experience recorded by Mr. Hutchinson the suggestion offered that "the high ratio of difficult labours may have been incidental to the breed. The attempt to obtain large animals by crossing the Leicester and South Down" was in all probability the true explanation of the mortality. This was a well-recognised fact among sheep farmers who were always careful to avoid placing rams of a larger breed with ewes than experience warranted, for this very reason. As to "the death of the fœtus before delivery being a far more serious occurrence in sheep than in the human subject," this might be explained by the greater apathy among shepherds owing to their attention being divided among so many, than is the case with medical men who, in addition to special knowledge, individualise their cases, and where death of the fœtus occurs before labour induce delivery at once, before any ill results from decomposition or putrid infection have had time to take place, but where this has been neglected septicæmia is by no means infrequent. In the case of a small Maltese terrier lined by a dog of a larger size, the first pup was so large as to interfere with delivery. Labour commenced during Dr. Edis's absence from town, and on his return, two days afterwards, a dead decomposed pup was extracted with difficulty; the mother never rallied, and died within twelve hours. At the post-mortem the horn of the uterus in which the dead pup had lain was gangrenous. The remaining horns occupied by two other little ones, that had probably only died when the mother ceased to live, were healthy and showed no trace of inflammation, thus confirming Mr. Hutchinson's observations as regards the want of proportion between the fœtus and the natural pelvis being the cause of death in the former, the presence of the dead fœtus inducing metritis.

Dr. BRAXTON HICKS said that he thought Mr. Hutchinson need not apologise for adding the navel-ill to the other portion of his paper, as he had been given to understand that in the severe epidemics of puerperal fever the children were sometimes afflicted with peritonitis. He therefore would ask Mr. Hutchinson if he had noticed any connection between the pyæmic cases and the navel-ill.

Mr. HUTCHINSON, in reply, asked whether, in the epidemic mentioned by Dr. Hicks, any distinct deposits were found in the liver from inflammation of the navel. He was surprised to hear children suffered so. In all his lambs which died of the navel-ill pyæmic deposits were invariably found in the liver. The lambs affected were not solely from sheep suffering from tetanus.

There was no association between the two as far as he had observed; the tetanus in the ewes was due to the food taken. In one lamb the navel was long, and had not been nibbled by the ewe. Many of the lambs had not been touched by the shepherd. Dr. Playfair had suggested that the cases were possibly those of peritonitis, pyæmia, and metritis analogous to puerperal fever in the human subject; that the first case was autogenetic, and the others from contagion. The details given showed that any supposition of that sort was out of the question, the dates showing that the cases occurred at considerable intervals from each other. In several it seemed due to the retention of a dead lamb before delivery. It was puzzling to explain how one year there were many deaths and another none. He had no reason to believe the inflammations of the uterus had any relation with each other. They seemed to arise of themselves, and from independent sources. As regards tetanus, he had not seen any case among the lambs; and, as to the influence of food, he thought this had little to do with it, as last winter the ewes were fed on cotton cake, but there were no cases of inflammation. The disproportion in the size of the lamb's maternal passages he considered a very important point. Dr. Cooper Rose asked whether the land was manured by artificial manure, to which Mr. Hutchinson replied that the ewes were fed on turnips, and not on grass.

Dr. WILTSHIRE inquired whether there were any yew trees about, to which Mr. Hutchinson replied in the negative.

APRIL 5TH, 1876.

WILLIAM O. PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

Present—60 Fellows and 9 visitors.

Books were presented by Dr. R. Birnbaum, Dr. P. Budin, Mr. J. F. Eyeley, Dr. Playfair, Dr. J. Roussel, Dr. E. J. Tilt, the Royal College of Physicians, and the American Medical Association.

Dr. Geo. E. Herman, Dr. C. S. Redmond, and Mr. Litton Forbes were admitted Fellows of the Society, and the following gentlemen were declared admitted: Mr. John Branson (Rotherham), Dr. H. T. Lanchester (Croydon), Mr. G. H. Lilley (Coventry), Dr. A. J. Miles (Cincinnati), and Dr. A. D. L. Napier (Fraserburgh).

The following gentlemen were elected Fellows: John P. Baker, M.R.C.S., F. H. Champneys, M.B., M. O. Coleman, M.D., John Gill, M.D., A. C. Godfray, M.B., (Jersey), J. E. Grinfield-Coxwell, L.K.Q.C.P. (Worthing), J. E. Hebblethwaite, M.D. (Bawtry), J. W. Roe, M.D. (Ellesmere), G. M. Sharpe, L.F.P.S., Glasg. (Leeds), L. D. Spencer, M.D., F. W. Spurgin, M.R.C.S., A. Weir, M.D. (Gt. Malvern), A. T. P. Wise, M.R.C.S., and E. Worts, M.R.C.S. (Colchester).

The following gentlemen were proposed for election: Mr. John Crew (Higham Ferrers), Mr. Geo. A. Duke, Mr. G. C. Horsman, Dr. Jude Huc (Rouen), and Mr. F. Scovil.

Dr. G. C. P. MURRAY stated that he wished to bring before the Fellows of the Society for their acceptance or otherwise the following vote of thanks:

"That the Obstetrical Society of London present a vote of thanks to Dr. Arthur Farre, Dr. Barnes, and Dr. Priestley, for having resigned their Posts of Examiners in Midwifery at the Royal College of Surgeons, in the interests of the Science and Practice of Obstetrics."

He had little to add on the subject, as the matter had been prominently before the profession for some little time; but he did think that a permanent record should be made of the opinions and action of the gentlemen he had named.

He could not but admire the unhesitating resignation of Dr. Barnes, and although Dr. Arthur Farre, being their Honorary President, was hardly expected to take an active part in this matter, he entered into it with much feeling. Dr. Priestley, who doubtless was placed in a position which required some amount of reflection, could come to no other determination.

Dr. Murray considered the College authorities very unfair in trying to put on these gentlemen so unjust and unprecedented a task, which to their honour and credit they have declined to perform. The license in midwifery was considered to be an additional qualification, but never intended to stand alone, and so to speak, place partially educated persons on a level with those who had or could obtain a complete and perfect medical education. He hoped that the example now set would deter any member of the profession from accepting the posts which have now been vacated.

Mr. WORSHIP (of Sevenoaks), seconded the resolution of Dr. Murray. Being a general practitioner on the Council he wished to say the object the Royal College of Surgeons had in view, of sending a number of mere Licentiates in Midwifery to practise in the country was very detrimental to the status of the profession, and all those with whom he had consulted on the subject were condemnatory of the scheme

That the thanks of the profession were eminently due to Drs. A. Farre, Priestley, and Barnes for their energetic protest against this course, shown by their immediately resigning their positions as Examiners in Midwifery to the Board of the College.

That in the branch of the profession of which the Obstetrical Society is the representative it was most incumbent that none but well educated and honourable men should be able to obtain a diploma; and that should this scheme be passed into action a number of half educated men would be allowed to practise Midwifery nominally, whereas there would be no restriction to their practising in other branches of the profession; and thus by their Diploma would represent that they, as Licentiates in Midwifery, were especially qualified to practise that portion of our Profession in preference to those Members who had gone through the entire curriculum of the College.

He deeply regretted that such a scheme should have been proposed during the Presidency of Sir James Paget, who had always hitherto striven to elevate the education of medical men, and that he considered this a very retrograde movement.

The resolution was carried by acclamation.

Dr. BARNES, who was greeted with loud cheers, said that the position of Dr. Priestley as President, precluded him from putting the resolution to the meeting, but the reception it had met with rendered that unnecessary.

His (Dr. Barnes's) course had been taken as a plain duty, looking neither to the right hand nor to the left, but to the future. He considered the proposed action of the College of Surgeons detrimental to the interests of the profession and injurious to the public.

It was a matter of intense gratification to him to see that the policy he proposed had met with the approval of his brother practitioners, and he begged leave to express

his thanks to the Society for the kind way in which they had received it.

One of the great grievances of our department was that it had no representative voice at the College of Surgeons or in the General Medical Council.

The only means we had therefore of expressing our views to the outside world was through the Society.

We had only to hold our own and act stedfastly together, and the College must give in.

The past Presidents of the Society and others had declined to take the vacant examinerships, and the thanks of the Society were due to them for their refusal.

The PRESIDENT hoped the Society would excuse him if in the present position of the question, he expressed his thanks for the resolution, which had been carried by such acclamation, very briefly.

He might say that he had entire sympathy with the resolution which had been drawn up by the Council, and forwarded to the College of Surgeons as a protest against admitting partially qualified persons to the Medical Register; but he had been placed, as Dr. Murray had pointed out, in a double difficulty, being anxious on the one hand as President of the Obstetrical Society, to give effect to the resolutions passed by the Council; and on the other hand, as an old Examiner of the College of Surgeons, being reluctant to behave discourteously to the College, or to obstruct its authorities in attempting to render obedience to the law, as it had been expounded to them.

On full consideration, however, he and Dr. Farre had come to the conclusion that the College proposed to impose a duty upon them as Examiners, under circumstances which had never occurred before, and they had consequently asked to be relieved of their functions at once.

He believed he might be permitted to say for Dr. Farre, as well as himself, that it was a great grati-

fication to know that their conduct in this matter, met with the approval of the Fellows of the Society, and of the medical profession generally.

REMARKABLE DEVELOPMENT OF AN INFANT.

Dr. Cameron, of Owen Sound, Ontario, sent the particulars of the remarkable development of an infant, accompanied by a photograph taken when the child was one year old, which he thought would be interesting. Stella L—, the subject of his communication, was born March 8th, 1873. She was the fourth child of her parents, and when born weighed fourteen pounds. The labour was easy and natural in every respect, and was completed within six hours. She was nursed by her mother and increased rapidly in size and weight. When twelve months old her weight was sixty-nine pounds, and her height 35¼ inches. She then measured thirty inches around the chest, 20½ inches around the thigh, 11¼ inches around the calf of leg, 11 inches around the arm above elbow, and 7½ inches at the wrist. At the age of thirteen months she weighed seventy-five pounds, and at seventeen months ninety-eight pounds. She was not weaned until she was two years old, at which time she commenced to walk. In addition to her mother's milk her food consisted of various farinaceous substances, such as form the ordinary diet of children.

The parents were large and well developed, but not remarkably so; and their other children differed in no respect, as regards development, from ordinary children of their respective ages. Stella L— is a bright intelligent child, and according to the latest accounts from Michigan, to which place her parents have removed, she is perfectly healthy and still increasing in size. I doubt much if in "all England" you can match this Canadian baby.

CASE OF INTRA-UTERINE PERITONITIS.

Dr. MacCallum, of Montreal, attended very recently a lady in her confinement who gave birth to a male child, who died five days after from complete obstruction to the bowel, the result of extensive *intra-uterine* peritonitis. The labour was perfectly natural and progressed favorably, there being nothing to attract particular attention, until after the expulsion of the head. At this time the shoulders not passing the vulva, although uterine action was strong and vigorous, he passed his finger within the axilla of the child, and by assisting during the pains succeeded in bringing the shoulders and body through, when the difficulty was found to have been due, not to abnormal width of the shoulders, but to unusual dimensions of the abdomen. It was very tense, and distended to such an extent that respiration was with great difficulty established. The child slept well during the night, and did not appear to suffer the least inconvenience. On making his visit the next day he learned from the nurse that the child had micturated freely, but that nothing whatever had passed from the bowels. A careful examination of the anus proving that the external aperture of the bowel was perfectly patent he ordered an enema of simple water to be given, and if this did not have the desired effect, to administer a dose of castor oil. Neither having produced a motion, he made a second examination, introducing his little finger as far as it would reach into the intestine, but no obstruction could be felt. The child soon became fretful and restless, vomiting set in, which shortly became stercoraceous, and death took place on the ffith day.

The autopsy was made fifteen hours after death. The whole surface of the body was discoloured; abdomen greatly distended; fœtid fæcal matter oozing from nose and mouth on moving the body. A single straight incision was made along the linea alba from the ensiform

cartilage to the symphysis pubis. The abdominal parietes were firmly glued to the anterior surface of the large and to a portion of the small intestines; in fact, so thick were the agglutinated structures, so strong was the union and so great the congestion, that it was impossible to tell when the bowel was reached till a nick had been made which gave exit to the fæcal contents. A large quantity, fully a pint, of thick ropy fæcal matter, horribly offensive, was removed. The distension being thus relieved, the coils of intestines were found to be bound to each other and to the parietes by numerous and extensive adhesions, many of them being thick and strong, and apparently of no recent date. The large intestine especially seemed affected, being much enlarged, thickened, quite dark, and in some places even black. The whole bowel presented the appearance of having suffered from intense as well as prolonged inflammation. The mesentery was greatly thickened and congested. The smaller bowel seemed to have been involved chiefly in a more recent inflammation, as the adhesions and effused lymph were fresher and apparently of later date than in the large bowel. The stomach and bowels were removed entire; the former was quite natural; the small intestine was traced carefully down, and, with the exception of the inflammatory changes, was found to be quite normal till within about six or eight inches of the ileo-cæcal valve, where a tough inflammatory band stretched across the bowel, forming a practically impervious stricture, and almost amputating the intestine. The bowel had also twisted on itself nearly a quarter of a circle at the constriction, so that a small probe could with difficulty be passed through at this point. Below this the bowel was pervious throughout, although at two places its calibre was very considerably lessened by adhesions, with thickening and induration of the coats. At one point in particular, about two inches above the valve, two hard rounded oval bodies, of cartilaginous consistence, each about the size and shape of a bean, imbedded in the coats of the bowel, encroached upon the canal to such an extent as to leave

only a small triangular aperture, while on both sides of this, the walls were dilated into a good-sized pouch. The whole of the large intestine was much thickened, and in places was considerably distended and sacculated. The cæcum was dilated into a large pouch, with walls varying from one eighth to one fourth of an inch in thickness.

There was no history of syphilis in this case, the parents being perfectly healthy, and their other children presenting the appearance of sound good health. The mother did not experience any unusual sensations, nor were there any increased movements of the child observed during the period of gestation, and labour came on at full term.

Dr. HAYES inquired if any of the Fellows of the Society had observed intra-uterine peritonitis of the fœtus as the result of congenital syphilis. He had never met with it, nor had he ever seen peritonitis after birth occur in infants affected with congenital syphilis. He was not aware that peritonitis, as distinct from adhesive thickenings, was induced by the acquired disease. It was most desirable that peculiarities between the two forms of disease should be pointed out and confirmed. Syphilitic intra-uterine peritonitis rested chiefly on the observations of Sir James Simpson.

Dr. BARNES stated that he had seen general peritonitis in infants affected with syphilis, but whether it was due to this latter he could not say distinctly.

PLACENTA WITH UNUSUAL ARRANGEMENT OF VESSELS.

DR. A. E. AUST. LAWRENCE, of Clifton (Bristol), exhibited a placenta which presented the following peculiarities. The umbilical cord, instead of passing to the centre of the placenta before it distributed its vessels, was attached to the amnion for eight inches previous to arriving at the margin of the placenta. Whilst running on

the amnion in this way it distributed two large vessels, which ran on the amnion, skirting round the placenta before they finally ended in that structure. A third smaller vessel showed signs of a recent rupture, and near an old blood clot, two inches from the edge of the placenta another vessel was seen, as if it had given way to form the clot. There was a fibrinous deposit under the amnion close to the edge of the placenta, this, together with the old blood clot, produced sufficient adhesion between the placenta and uterus as to necessitate manual removal.

The history of the woman from whom this placenta was removed, was one of great abdominal pain the last three months of pregnancy, and two rather severe attacks of hæmorrhage during the third and fourth month. The child was well formed and well nourished.

At the request of the President, Dr. Lawrence gave the specimen for the Museum of the Obstetrical Society.

CASE OF EXTRA-UTERINE FŒTATION.

Mr. Edwin Child narrated the following case:

On January 7th, 1876, he was called to see Mrs. S—, the wife of a labourer, whom he had attended for a severe attack of colic the previous summer.

She told him that she had been ill for a fortnight, that she had over-reached herself in hanging out some clothes, which had brought on, as she thought, her old friend "the colic." Finding, however, that she did not get better she sent for him. She told him that she had been unwell, was not pregnant, and that the discharge was going away, which proved correct, for it left her the next day.

He found her suffering from peritonitis, particularly over

the ovarian and uterine regions. He prescribed calomel and opium, and poultices to the abdomen.

8th.—He found the peritonitis had extended all over the abdomen, and she had ovaritis as well. He continued the same treatment; but in order to relieve pain he applied poppyhead fomentations and turpentine, which gave her some relief.

9th.—In addition to the above to deal with, he found enteritis as well, and she began to suffer from sickness, to relieve which he ordered her to suck ice, and gave her an effervescing mixture, with prussic acid and morphia, which did her much good. He had also to begin to use the catheter, which state of things continued off and on till the time of her death.

12th.—Finding the abdomen getting distended and detecting effusion, he prescribed Dover's powder and Hyd. c. Cret.

15th.—The bowels which had up to this time acted tolerably well now became troublesome. This he attributed partly due to the opium, and partly due to bands of lymph, the results of the enteritis. For this he gave her enemas of soap and water.

16th.—Matters became worse. The tongue became much drier, the countenance more anxious, pulse higher, &c. The temperature, which had been up to this time steadily at 100°, now began to rise. He still trusted to the enemas with castor oil, and which proved successful. (The patient still took ice.) Fer. Ox.

18th.—The bowels acted in the evening, which gave her great relief. The pulse went down, tongue moister, and all the symptoms ameliorated.

The next day, January 19th, he found the symptoms still improving, and she expressed herself as better, but on passing the catheter in the evening he discovered she had become again unwell. He asked her again if she were pregnant and she said she was sure she was not, nor had she been so for years.

At 6 a.m. the next morning, January 20th, he was

hastily summoned, as she was said to be dying; when he arrived at the house he found her quite dead. Her mother then told him that a short time after he left in the evening the discharge per vaginam increased, several clots passing. She had left her husband to watch her who, falling asleep, was awakened by finding her out of bed at 3 a.m. and in the act of relieving her bowels. She told him that she had passed something from the womb and was relieved in consequence. With difficulty, with his assistance she got back into bed. Finding her get worse and in a collapsed state they sent for Mr. Child. He found clots in abundance in the bed, and that she had had profuse hæmorrhage, which was the immediate cause of death.

The substance that passed he examined, and being puzzled over it, with the consent of the friends and by the help of Mr. Bailey, of Kingston, he made a post-mortem the next day. The body was well nourished. On opening the abdomen, the peritoneum and bowels were found glued together and black. There was serous effusion and clots in the abdomen, chiefly in the recto-vaginal pouch. Both ovaries were enlarged, particularly the left, which was the size of half an orange, with a distinct rupture at its base, which seemed to be connected with a large cavity with rugged walls situated at the posterior aspect of the uterus. At the bottom of this sack or cavity was an opening into the vagina through its posterior wall. In the cavity of the abdomen was found a fœtus fully formed, about three inches in length. The uterus was unimpregnated. Some difficulty was experienced in making the friends believe she was in the familyway, nor would they realise it until the fœtus was shown to them.

In consequence of the matting together of the whole of the parts, he had great difficulty in getting them away and making them out, but such as they are, he had brought them up for inspection, viz. the uterus and its appendages, the mass that passed, also the fœtus.

It seemed to him that the mass that passed during defæcation was the lining of the sac which came

through the opening in the posterior vaginal wall, through which came all the clots early in the night, the posterior vaginal wall in question being softened and easily broken down by inflammation, &c.

In the first place, not attaching to the case the importance he afterwards did, when he found out what it really was, he omitted to take notes, These were from memory, and if rather vague he must ask the indulgence of his auditors.

The PRESIDENT inquired whether any decidual membrane was present in the uterine cavity.

Dr. AVELING suggested that it was probably the decidual membrane which had been passed before death.

Dr. EDIS stated that he had what he believed to be two cases of extra-uterine fœtation under observation just now. In both, violent pains in the abdomen, described as colic, were prominent symptoms. The catamenia were regular as to time, but less than usual. The uterus was pushed over to one side, and there was a progressive development of the growth presumed to be extra-uterine fœtation. He thought the case related by Mr. Child one of much interest, and that it would be well if practitioners would place on record interesting cases of this nature that might serve as landmarks for future guidance.

Dr. PLAYFAIR inquired what treatment was proposed in these cases.

Dr. EDIS replied that the cases had only recently come under observation, and were attending as out-patients. One refused to remain in the hospital, and the other had gone off to the country. He had since heard that the latter had had a severe attack of "inflammation of the bowels," her life being despaired of, though she was still living.

CANCER OF OVARY EXTENDING TO UTERUS AND RECTUM.

By Dr. JAMES W. J. OSWALD.

EMMA B—, æt. 42, married, sent for me on the 19th October, 1875.

On my arrival I found her in bed suffering intense pain from a hard swelling situated immediately over the pubes.

She stated that the swelling began in the left side, and had been coming on for the last seven months. Had had six children, the youngest being ten years old, but had a still-born child eighteen months ago. Could not walk without pain. Complained of a great bearing-down pain. Was regular. Had a little leucorrhœa.

On examination I found the abdomen large and tympanitic. In left iliac fossa I felt a hard irregular tumour apparently made up of processes. The mass being as large as a child's head, very painful to the touch, but freely mobile. The sound passed in a right lateral anteverted direction, and the uterus itself seemed much enlarged, laterally and posteriorly. The actual distinctiveness of the tumour from the uterus I could not determine.

I prescribed opiates internally and turpentine stupes to abdomen, which slightly relieved her. By the kindness of Dr. Routh she was admitted an in-patient of the Samaritan Hospital on the 26th October, 1875. She was there seen and examined by Drs. Routh, Rogers, Williams, Savage, and Greenhalgh, who came to the conclusion that the disease was of a malignant character, and that any operative interference would prove fatal.

The following treatment kindly furnished to me by Dr. Routh was pursued when in the hospital:

On admission patient was ordered four ounces of wine daily. Owing to severe pain a suppository consisting of two grains each of opium and extract of belladonna at night.

October 30th.—Very little relief; Emp. Lyttæ to side; Hydrarg. Bichlor. gr. $\frac{1}{12}$, Pulv. Opii gr. ss. twice a day.

November 3rd.—Tumour appears more extensive than when last examined, not only on left side, but now distinctly felt to right side, where all pain is referred; but the uterus seems free; repeat blister to right side.

4th.—To-day feels faint, but all pain is gone. To take Mistura Ferri ℥j three times a day.

6th.—Medicine makes her feel sick; to take half dose only; no pain.

15th.—A piece of the tumour as big as a hand can now be felt on the right side, and on the left the tumour also appears to be growing; extends as high as umbilicus; uterus also feels larger and seems semifixed; pain is greater.

23rd.—Pain again worse; slight fluctuation on left side, especially felt when she is made to lie on that side; repeat pill cum Hyd. Bichlor. and Opium.

28th.—No improvement; pain worse; repeat suppository every night.

December 2nd.—Pain persists, though occasionally entirely disappears. In the supposition it was neuralgic in a measure Syr. Iodid. Phosphor. was ordered, but it seemed to increase rather than to diminish the pain and so was suspended; suppositories continued; repeat the blister.

6th.—Pain better, but a little ascites can be felt in abdomen; tumour certainly enlarging; uterus fixed; appearances and rapid growth leading to the conclusion that the disease was malignant. After consultation with Dr. Greenhalgh patient was discharged and left the hospital on December 11th.

She came again under my care on December 12th, the day after she was brought home.

I found her in the greatest agony, being supported in bed with pillows, and quite unable to lie down in any position. I gave her a quarter of a grain of acetate of morphia every three hours, and ordered a large linseed poultice to be applied over the abdomen. These measures relieved her considerably, and she was able the following day to lie down. She continued in this state with very little variation till the 18th of January, 1876, when she died.

Post mortem made the following evening twenty-one hours after death. On opening the abdomen a considerable quantity of fluid escaped, the body being very much emaciated, rigor mortis not marked.

On opening thorax on the left side the lung was found considerably compressed against the spine; left pleura contained a considerable quantity of serum; no adhesions. Right lung much enlarged, right pleura also full of fluid; no adhesions. Pericardium also full of straw-coloured fluid; no adhesions.

Heart rather small; right auricle and ventricle filled with post-mortem clot; left ventricle filled with dark venous clot; heart itself in an extreme state of fatty degeneration. On examining the peritoneum there were well marked signs of recent inflammation, all the organs being matted together by old adhesions.

Liver much enlarged; the Spigelian lobe infiltrated with a soft growth as large as a walnut, and scattered over the surface of the liver were several nodules.

Stomach healthy to all appearance; spleen, surface studded with some hard nodules as hard as a pea; kidney, right, pelvis enormously distended with clear fluid, not urinous; left kidney, normal; mesenteric glands converted into one mass of hard nodules; iliac glands in the same condition; stretching from umbilicus to symphisis pubes is a large mass which completely fills both iliac fossæ, and the cavity of pelvis is covered on surface with lymph, and firmly adherent to the walls of the pelvis in front and to the viscera behind. This mass was removed, and I have since examined it with the following results.

On opening the uterus the cavity was found to be about five inches long, the Fallopian tube coming off about an inch from the fundus; os and anterior wall apparently quite healthy. At the entrance of the left Fallopian tube is a soft mass about the size of a Spanish chestnut and exuding a milky juice on pressure. The tube is patent, but is closely surrounded by regular nodules. What appears to be the left ovary is converted into a sac containing about half a pint of opaque yellow fluid, the sac at some places extremely thin; the right Fallopian tube cannot be distinguished. From right side of uterus, where right ovary ought to be, is a large mass about

seven inches long, and about six from before backwards. On section, mass presents uniform structure; in the centre is one spot of softening as large as a marble. On a level with the os the rectum is compressed on both sides by two nodules forming a complete stricture through which the finger can with difficulty be passed. The mucous membrane of this region slightly red, otherwise healthy.

On submitting a portion of the tumour to microscopic examination it was found to consist of numbers of cancer cells.

THE MECHANICAL ACTION OF PESSARIES.

By JOHN WILLIAMS, M.D. Lond.,
ASSISTANT OBSTETRIC PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL.

THE pessary invented by Professor Hodge, and now generally used for the cure of retroflexion of the uterus, has been called a "lever pessary" from its supposed action in elevating the fundus by direct pressure on that part, exercised through the posterior *cul-de-sac* of the vagina. Careful examination, however, of a uterus replaced and maintained in position by such a pessary seems to show that its action is not that generally attributed to it. If, while the uterus is maintained in its normal position and the pessary is *in sitû*, the sound be introduced, it will be found that the end of the instrument at the fundus of the uterus is much further from the posterior border of the pessary in the vagina than can be accounted for by the combined thickness of the walls of the vagina and of the uterus. That is, the pessary does not press against the posterior wall of the uterus, the posterior wall of the vagina alone intervening.

A similar observation is true of anteflexion pessaries, and can be verified in a similar manner. The shoulder of

the pessary which lifts the anterior wall of the vagina does not press against the fundus of the uterus so as to straighten the bent organ, and consequently its action is not to directly elevate that part of the uterus as has generally been supposed.

The true action of Hodge's pessary was, I believe, first explained by Schultze. It is to stretch the vagina, especially the posterior wall, and by this means to drag the cervix uteri backwards and somewhat upwards towards the sacrum. This, in many cases, has the effect of raising the fundus and tilting it forwards, and in this manner bring the posterior surface of the organ under the influence of abdominal pressure, which, when the woman is in an upright position acts in a direction continuous with that of the anterior surface of the vertebral column. The real action of a Hodge, then, is that of the power in a lever, the uterus itself being the lever, the fundus the weight, and the point of reflexion of the peritoneum from the anterior uterine wall the fulcrum.

It has, moreover, another action in those cases where the uterus is large and in such a flabby condition that dragging back the cervix instead of tilting the fundus forwards simply increases the bend in the organ. In these cases the pessary prevents the descent of the fundus into Douglas' pouch by bringing the walls of that pouch into apposition, and thus, in a certain degree, it directly elevates the body of the uterus.

For rather more than a year I have almost entirely discarded Hodge's pessary in the treatment of retroflexion, and have employed two other instruments, one of which is similar to that recommended by Schultze. It is formed of a ring bent into the shape of the figure 8, one ring of the 8 being considerably smaller than the other. The instrument is introduced with the smaller ring directed backwards and the larger forwards towards the pubic arch. Into the smaller ring the cervix enters, and is carried by it backwards and upwards. The anterior ring is made of such length as to stretch to the necessary degree the

anterior wall of the vagina, but the posterior is not stretched at all.

The second form is somewhat different. A ring is first bent into the shape of the figure 8; then the smaller, which should be just large enough to receive the cervix, is bent forward over the larger ring, and the latter is made into a small oval with a sharper curve than that of the vagina. The pessary should be made in such a manner that the distance from the anterior edge of the larger ring to the anterior edge of the smaller be such as to put the anterior wall of the vagina on the stretch.

The first form is somewhat difficult of application, inasmuch as it often causes pain by pressure on the rami of the pubic arch, and it occasionally fails in attaining the wished for object, because it permits the cervix to slip out of the smaller ring, and so be dragged forwards.

The second form is easier of application, and is, besides, a most comfortable instrument to the patient. Moreover, I have never met with an instance in which the cervix had slipped out of the smaller ring; indeed, the angle at which the smaller ring is bent on the larger may be regulated so as to make it almost impossible for such an accident to take place.

The disadvantages of a Hodge's pessary are, that it stretches the whole of the vagina, especially the posterior wall—a complication to be avoided in the treatment of the retroflexed uterus. In many cases, again, it fails of the object in view—the maintenance of the uterus in position. This happens more especially in those cases where the anterior wall of the vagina is short. The insertion of the vagina anteriorly into the uterus is appreciably lower than it is posteriorly, and this renders it hardly, if at all, possible to elevate the fundus by stretching the posterior wall of the vagina in the cases referred to. Were it possible at the same time to stretch the anterior vaginal wall, so as not to drag on the cervix, the object could be accomplished, but this cannot be done by a Hodge.

Again, the fundus of the retroflexed uterus is often

markedly tender, and in these cases a Hodge's pessary is unbearable on account of the pain it causes. In cases complicated by prolapse of a tender ovary, a Hodge cannot be used for a similar reason. There are some cases also in which the uterus is so large and flabby that though the lower two and a half inches of the organ are maintained in a normal position by a Hodge's pessary, yet the part above becomes bent over the upper border of the instrument, and an acute retroflexion is brought about and maintained.

The advantages of the pessaries shown are that they can be used in all these conditions. They do not stretch the vagina as a whole, they do not in any degree stretch the posterior wall. In those cases where the anterior wall of the vagina is shorter than usual, they lengthen it and maintain the uterus in position. I have used them in cases where an ovary was prolapsed and the fundus of the uterus very tender, and they have caused no discomfort. In some cases, however, when the uterus is large and heavy the pressure exercised on the cervix causes a swelling or an œdema of that part—a condition which would naturally be expected from the manner in which the pessary acts.

Their action appears to be the following:

They raise the uterus as a whole, carry the cervix backwards by direct pressure upon it, and tilt the fundus forwards; in this manner the posterior surface of the uterus becomes exposed to the abdominal pressure, which is the active power in straightening the organ and maintaining it in that condition.

In some cases reposition alone is enough to cure the displacement, but these cases are of great rarity; in all others there is no power that can straighten the uterus and maintain it so except the abdominal pressure, unless recourse be had to intra-uterine stems, instruments which are used by many physicians, but which, nevertheless, are not unaccompanied by danger.

I have taken Hodge's as a representative pessary, all

other vaginal pessaries in use for retroflexion being modifications of it, have a similar action, so that it is unnecessary to discuss them further.

The chief pessaries in use for anteflexion are those of Dr. Graily Hewitt, Dr. Playfair, and Dr. Thomas's anteversion pessary.

The three are generally supposed to act on the same principle, that is, they elevate the fundus uteri by direct pressure upon that part through the anterior vaginal walls. I have already pointed out that such is not their action, and would state further that wherever the fundus is pressed upon by these pessaries the flexion is not cured.

Their action appears to be that of the power in the system of lever—the uterus being the lever, fundus the weight, and the insertion of the vagina into the posterior wall of the uterus, the fulcrum. The power here is not applied to the cervix directly, but by means of the anterior wall of the vagina, which communicates it at its insertion to the cervix.

Taking Dr. Hewitt's pessary first, the instrument causes the anterior wall of the vagina to bulge upwards and brings its two extremities nearer to one another. By this means the uterus is brought nearer the vaginal orifice, the whole uterus is lowered in the pelvis and retroverted, so that its anterior wall becomes exposed to the abdominal pressure. The posterior wall of the vagina is not stretched, but somewhat inverted, so that the posterior cul-de-sac becomes deeper. Thus its action is the exact reverse of the retroflexion pessaries.

The accuracy of this observation is proved by the fact that in cases of anteflexion cured by this instrument the uterus is lower than usual, and somewhat retroverted, sometimes so much so that the sound passes the uterus almost in a direct line with the canal of the vagina.

Further the cervix is received into the posterior ring of the pessary and becomes more or less fixed. This is a condition necessary to the cure of a long-standing distortion, for cases are not unfrequently met with in which

the uterus is anteflexed and retroverted, and though the retroversion is met with on many successive examinations yet the flexion does not disappear. The reason seems to be that the cervix is not fixed.

This pessary has the following disadvantages:—It is in some cases difficult of introduction, and still more so of removal. Besides in many cases the cervix of the uterus, especially the anterior lip, becomes swollen and œdematous. This is due to the descent of a portion of the anterior wall of the vagina with the cervix into the posterior ring of the pessary. Return of the blood from the cervix along the veins into the vaginal plexus is obstructed, and passive congestion follows. That this is due to the instrument cannot be doubted, for when it has been removed for a short time the œdema disappears. This evil could probably be prevented by making the ring to fit the cervix in each case, and by making it circular instead of having a narrow fissure running to the shoulder as at present. This would prevent the descent of the vagina with the cervix into the grasp of the pessary, and the swelling would be avoided.

Of Dr. Playfair's instrument I have had no experience. It seems, however, to be constructed on the same principle as Thomas's.

Thomas's consists of a basis of a Hodge's pessary, to which is joined an anterior ring which bulges the anterior wall of the vagina upwards. The instrument is supposed to correct the flexion, embrace the uterus, and maintain it in position. This no doubt is true in cases where the uterus is so flabby and soft as to assume at one time a state of anteflexion, at another of retroflexion, and where the vagina is of great capacity. In such cases the instrument is a most valuable one. The objection to it in general is that the basis or Hodge part is too large and long, so that it prevents the descent of the uterus to the degree necessary to expose the anterior surface to the abdominal pressure. Were the basis shortened in such a manner as to permit this descent,

and were the space between the posterior part of the basis and the anterior shoulder made into a ring so as to receive and fix the cervix this instrument would appear to be on mechanical principles an admirable one. In its present form, however, I have found it suitable only in the cases mentioned. Professor Thomas has, I believe, considerably modified the instrument, but I have had no opportunities of using it in its new shape.

On theoretical grounds Dr. Playfair's pessary is open to the same objections as Dr. Thomas's, that is, it does not admit of the required degree of descent of the uterus, and it does not fix the cervix, conditions which appear to be essential to the cure of anteflexion.

The conclusions arrived at then are:

No vaginal pessary can make a crooked uterus straight by pressure on the fundus.

The action of the anteflexion and retroflexion pessaries named is that of the power in the lever system, the uterus itself being the lever.

The power is applied immediately to the cervix by means of the vaginal wall in the Hodge and anteflexion pessaries. It is suggested in cases of retroflexion to apply the power immediately to the cervix.

More or less fixation of the cervix is necessary for the cure of both retroflexion and anteflexion.

The only effect of pessaries is to bring the uterus into a position which favours the removal of the flexion, and the efficient agent in straightening the organ and maintaining it in that state is the abdominal pressure. Consequently the uterus must be freely moveable in order that a pessary may be of any service.

This movability should be determined by the hands and not by the sound, for the uterus may appear reducible by the sound when considerable adhesions exist.

It is not necessary to straighten the uterus before the introduction of a pessary, but it is desirable in all cases and necessary in many to put the organ in that position in which it is intended the pessary should maintain it.

Since writing the above I have had an opportunity of seeing Dr. Thomas's anteflexion pessary. It is a very ingenious instrument consisting of three parts, two rings, which form the base, and a shoulder. The shoulder is fixed to the posterior ring; and this ring which is circular is jointed to the anterior (which has a somewhat oval shape) in such a manner as to permit the approach of the shoulder or bulb to the anterior ring and thus facilitate introduction and removal.

I have not had occasion to use this instrument, but it seems to me to be one of the most ingenious and perfect of anteflexion pessaries.

Dr. BRAXTON HICKS remarked that he quite assented to the mode of action of Hodge's pessary as described by Dr. J. Williams, and had for some time taught the same. But he thought that taken altogether, in actual practice, Hodge's pessary was as good a form as we had at present, because we wanted one which, although failing in some cases, yet was easily introduced and removed, a point of much importance when patients were sent away into the country. Those shown by Dr. Williams he thought more difficult to apply and remove, and if it slipped would give more pain. Dr. Hicks thought where patients were within easy reach we could employ such varieties, otherwise he considered the best for ordinary circumstances was the Hodge form. After Dr. Bantock's speech he said "In contradiction to some of the speakers he would remark that he had frequently seen anteflexion result from the use of Hodge's pessary from a condition of retroflexion, thereby shewing that the instrument if worn sufficiently long, had considerable influence for the correction of retroflexion."

Dr. GRAILY HEWITT had long intended to bring before the Society various considerations on the subject of pessaries, the subject having much occupied his attention. At present he would limit himself to remarking on the particular topics brought before the Society's notice in Dr. Williams' very interesting paper. In the first place he would state that he entirely concurred in what Dr. Williams stated as to the importance of the dragging action of the pessary on the cervix uteri in regard to its efficiency in helping to restore the uterus to its proper shape. The cervix was thereby made in some degree a fixed point and thus an exceedingly necessary object was secured And he would

state that in his own practice he had obtained very great benefit from attention to this mechanical axiom. While concurring fully so far with Dr. Williams, he, however, had found that in severe and long standing cases where the uterine tissues had become hardened and fixed in a distorted shape, attention to the principle insisted on by Dr. Williams was by itself quite inadequate in producing a cure and, in very many cases of long standing retroflexion for instance, the posterior portion of the pessary must be made long enough to actually touch and carry the fundus upwards to a sufficient extent. The repeated use of the sound was in such cases also necessary. With reference to the anteflexion cases the same remarks hold good. He would take this opportunity of stating that the "cradle" pessary as now used by him for the treatment of anteversion and anteflexion fulfils, according as it is placed, one or both of the necessary indications. For some time past he had been accustomed to place the cradle pessary not with the small ring backwards as represented in the third edition of his work on Diseases of Women, but with the large ring backwards. He had found that the liability to production of congestion of the cervix observed in some rare cases, was thereby obviated, while also the principle on which Dr. Williams laid stress was more completely also brought into play. But in chronic anteflexion cases, also, direct pressure on the fundus by means of the pessary was sometimes necessary together with the use of the sound.

Dr. PLAYFAIR considered pessaries of great value; in fact, no one could treat cases of flexion satisfactorily without them; but, unless careful attention were directed to the concomitant conditions, congestion, inflammation, hyperplasia, etc., we should not succeed. It was easy to run into extremes by neglecting or making light of conditions, and relying simply on exclusive attention to mechanical assistance. He regarded Hodge's pessary as a most admirable instrument.

Dr. BANTOCK agreed with Dr. Williams' conclusion that Hodge's pessary was unsuitable for *retroflexion*, but maintained that it was superior to any other in the treatment of *retroversion*. He went further and stated that any vaginal pessary was unsuitable in the great majority of cases of flexion whether retro or ante, and that the only reliable method was that by intra-uterine stem. The reason was obvious; for while a vaginal pessary acted, in the greater number of cases, by drawing back the cervix, and in the case of *retroversion* had the effect of restoring the cervix to its proper position, and so owing to the rigidity of the organ in these cases, restoring the uterus at the same time, in that of retroflexion the effect was to double up the uterus and increase the flexion. This he stated from observation. The same remarks applied also to anteflexion and anteversion. There were, however, a few cases in which the posterior cul de sac of the vagina was

so large as to permit of direct action on the fundus uteri by the use of a pessary with a long posterior limb.

Dr. AVELING considered the treatment of flexions and versions should be different. A Hodge's pessary was valuable in retroversion, but not in retroflexion, until an intra-uterine one had been inserted. He did not believe that the pessary doubled up the uterus, the fundus not being fixed. In old cases of confirmed rigid flexion a Hodge's pessary was of no use.

Dr. HAYES differed from Dr. Williams in regard to the value of Hodge's pessary in the treatment of retroflexion, and as to its mode of action. He thought the instrument most useful. In cases where the normal position of the uterus could not be maintained by it after *redressement*—such, unhappily, was the rule—it frequently relieved the backache, sense of bearing down, and dragging pain in left ovarian region. It effected this by directly raising the body and fundus of the uterus. He regarded the action of the pessary as that of a shifting lever. The lower extremity was pressed upwards by the anterior wall of the vagina, and so pushed the upper end against the uterine fundus or body. He could not understand how mere drawing on the cervix could raise the fundus. Retroflexion must be distinguished from retroversion. The uterus was more or less sharply bent, the bend being usually at, or just above, the junction of the body and cervix, and the cervix generally has slightly, if at all, altered in direction; often the displaced part was large and heavy and required support. Again, to derive benefit from a Hodge, how important it was to choose one that passed well up into the posterior cul de sac behind the fundus. When the posterior cul de sac was short and narrow, little, if any, benefit was derivable from a Hodge. This condition was frequently found in virgins and barren women, and prevented the upper end of the pessary from pressing against the fundus. Such cases of retroflexion were usually congenital, and associated with dysmenorrhœa.

Dr. ROPER remarked on the different conditions of the cervix and body of the uterus in retroversion and retroflexion, in reference to treatment by means of pessaries. In retroversion, the cervix and body of the uterus constitute one continuous rigid organ. Movement of the cervix is communicated to the fundus and *vice versâ*, thus the fundus may be made to rotate upwards and forwards by manipulating the cervix. The falling backwards and downwards of the fundus is always attended by a tilting upwards and forwards of the cervix. By acting on the cervix alone the fundus may be made to move in any desired direction, and there fixed by a Hodge's pessary. In retroflexion there is not this entirety between the body and cervix. They are separated from each other, in a measure, at the point of flexion by a kind of hinge or joint, by which the movements of the one are cut off from the other. Here when the fundus falls backwards and

downwards, the point of the cervix is not carried upwards and forwards or only to a very small extent. In very severe flexions the axis of the cervix in relation to the vagina is not much altered, thus demonstrating the independent movement of the two portions of the uterus. No amount of drawing the point of the cervix downwards and backwards will have any great effect on the fundus, but will tend to increase the flexion or double the cervix on the body of the uterus. As the upper end of the vagina is attached round the cervix and not round the body of the uterus, tension of the anterior vaginal wall will act principally on the cervix. It seems that the fundus must be carried upwards and forwards by a long Hodge's pessary, and if it be to effect much good it must be carried high up into the posterior fornix of the vagina so as to impinge on the body of the uterus at a point above the flexion; the longer the pessary the greater will be the tension of the anterior vaginal wall.

Dr. GODSON believed that many cases of retroflexion were the result of congestion supervening on simple retroversion, and that if the congestion be treated by rest, depletion, &c., the flexion may be converted into version and thus become amenable to mechanical treatment. Whereas if pessaries be employed while the flexion exists they are not only useless in remedying the displacement, but are mischievous as increasing the congestion.

Dr. GALABIN said that he believed the old view of the action of Hodge's pessary to be a correct one, namely, that the pessary itself formed a lever, to which the power was applied through the anterior vaginal wall. (He agreed with Dr. Graily Hewitt and Dr. Hayes in thinking that, although the effect of stretching the posterior cul de sac was an important one, Dr. Williams had directed too exclusive attention to this.) His own experience was quite opposed to the statement that the limb of the pessary never came into close contact with the fundus. That it did so might be ascertained on making a rectal examination immediately after the application of the instrument. (After a time no doubt the fundus was so far restored that the intra-abdominal pressure came to act upon its posterior surface, and then it no longer remained in contact with the pessary.) A second proof was to be found in the effect of increasing the curve of the pessary. He had often found this effectual in restoring the fundus, when the instrument with only a slight curve had proved insufficient, and since the shortened instrument would stretch the posterior cul de sac less, this could only be due to the direct pressure of its posterior limb. As a third proof he would say, notwithstanding the opinions of some previous speakers, that the pessary did often restore not only a retroverted, but a retroflexed uterus, and the mere drawing backward of the cervix would not account for this. He had, moreover, found the instrument to fail in cases of old women, in whom the posterior cul de sac was atrophied, the

explanation of which was that its posterior limb was then prevented from reaching the fundus.

Dr. MURRAY remarked that he had used Hodge's pessary with considerable advantage in cases of retroflexion; and cited a case in which he had brought the retroflexed uterus to a state of retroversion, and from the continued bearing of the pessary the uterus had become anteverted. For this condition he had used the cradle pessary with success. He considered it quite necessary to use a pessary where congestion existed owing to the displacement.

Dr. GRAILY HEWITT had often seen a case of retroflexion converted into one of anteflexion after the employment of a Hodge's pessary.

Dr. BARNES observed that, if we used a Hodge's pessary with full understanding of its action, we should never be disappointed. It was extremely important to replace the uterus before inserting the pessary. If the posterior limb of the pessary were well shaped, we had a double leverage, and the fundus was pressed up by it.

Dr. ROGERS regarded the Hodge's pessary as a useful and valuable instrument. In cases of flexion, it was often necessary to employ intra-uterine stems as well.

Dr. HEYWOOD SMITH said that Dr. Galabin had somewhat anticipated some of his remarks with regard to the use of Hodge's pessary in cases of retroflexion. In such cases he too modified the shape of the instrument so as to obviate some of the difficulties that had been referred to. He bent the upper portion to nearly a right angle, and the lower portion to a similar extent so as to avoid pressure on the urethra, besides which he bent the two angles formed by the upper curve somewhat outwards, so that while the upper limb pressed upwards on the fundus uteri the lateral portion kept the posterior vaginal wall on the stretch. With regard to obstinate flexions and more particularly in cases of anteflexion he considered that no treatment was so efficacious as that by intra-uterine stems, but it was necessary to use such with extreme caution, and after proper depletion of the uterus by leeches or puncturation, at the same keeping the patient in bed.

In reply Dr. WILLIAMS said that the object of the paper was to explain the mechanical action of pessaries; this being known, the conditions necessary for their efficient action became evident, and their use would be limited to cases in which they would prove serviceable. There were two objections raised to which he wished to reply, and they regarded the principle of action of Hodge's pessary. The first was that mentioned by Drs. Hewitt, Galabin, and Barnes, that the pessary pressed against the fundus uteri. This no doubt is the case in many instances, but in most of these the uterus is not made to assume its usual position in

the pelvis, indeed the organ in these cases remains retroverted and more or less retroflexed. The fact observed by Dr. Galabin that the pessary and fundus of the uterus can be felt to be in contact by the finger examining per rectum only proves my statement, for the finger in the rectum cannot reach the fundus when the organ is in its normal position. In some cases, however, the uterus is maintained in the normal position by direct pressure of a pessary on the fundus. In these cases the vagina is greatly distended, and its tissues relaxed from subinvolution or other cause. And in all these cases the Hodge once used becomes a necessity for life. The other objection made by Dr. Hayes and Dr. Galabin is that a Hodge did not maintain the uterus in position when the posterior wall of the vagina was abnormally short. This is quite true and the explanation of it evident. It is not because the instrument cannot press against the fundus uteri. In these cases the anterior wall of the vagina is also short, and it is inserted into the cervix uteri at a lower level than the posterior, and any attempt at dragging the cervix uteri backwards renders the anterior wall of vagina tense, thus preventing the object in view. If the anterior wall be first lengthened then no difficulty will be found in reposition of the uterus.

MAY 3RD, 1876.

WILLIAM O. PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

Present—41 Fellows and 4 visitors.

Books were presented by Dr. P. Budin, Dr. T. C. Minor, Dr. R. F. Weir, Dr. Carlo Liebman, and Dr. A. Mattei.

David W. Finlay, M.D., was admitted a Fellow, and the following gentlemen were declared admitted as Fellows of the Society:—Owen Coleman, M.D. (Surbiton), J. H. Croudace (Beverley), John W. Roe, M.D. (Ellesmere), H. A. Lovett, M.R.C.S. (Powick), G. Sirignano, M.D. (Naples), E. Worls, M.R.C.S. (Colchester), L. D. Spencer, M.D. (Bengal), J. C. Wilkinson (Crouch End), Leslie Jones, M.D. (Blackpool), A. Weir, M.D. (Great Malvern), A. C. Godfray, M.B. (Jersey), and Frank Wells, M.D. (Cleveland, Ohio).

The following gentlemen were elected Fellows:—John Crew, M.R.C.S. (Higham Ferrers), Geo. A. Duke, L.S.A., Godfrey C. Horsman, L.S.A., Jude Hue, M.D. (Rouen), and Frank Scovil, M.R.C.S.

The following gentlemen were proposed for election: J. R. Beck, M.D., Julius Elischer, M.D., H. Habgood, M.R.C.S., Charles Hammond, L.R.C.P. Lond., F. J. Marshall, M.R.C.S., William M. Tredennick, M.D., B. Syer White, M.R.C.S.

FLEXIBLE UTERINE SOUND.

Dr. G. C. P. Murray exhibited a flexible vertebrated sound, which could be introduced limp, and when inserted, by twisting a screw at the end of the handle (*e*) the flexed portion (*d*) became straightened and firm (*c*). The sound passes through a tube terminating in a bulb (*a b*).

This instrument is *easily* introduced into the most curved uterus, and by its gentle action a movable or adherent fundus can be detected without causing any damage, as is often the case with the ordinary sound.

The uterus can also be brought into its proper position, whereas when using the ordinary sound we convert a retroflexion into an anteflexion and *vice versâ*. A great danger is also avoided by its use, viz. that of passing the top of the *rigid* sound through the uterine wall.

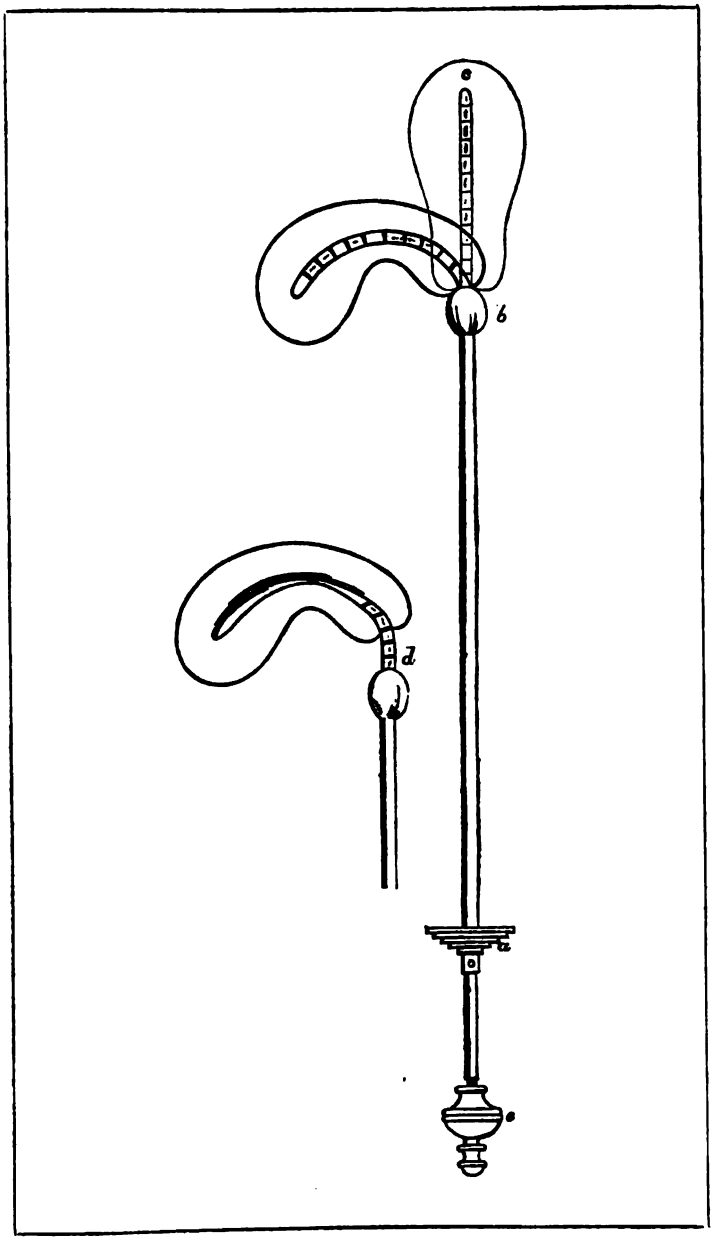
Dr. Hayes inquired if the uterine sound would pass through a healthy uterus.

Dr. Routh stated that we could not tell what was a healthy uterus until we had passed the sound. He had seen the uterus perforated on three occasions by the sound—passing right through the fundus.

The President mentioned that Sir James Simpson had asserted that the sound often perforated the uterine walls; but it was a question whether in these cases it had not found its way into the Fallopian tubes. If the sound traversed the peritoneum, there would probably have been some peritonitis set up. In cases of subinvolution the walls were soft and fatty.

Dr. Grigg said he had seen in the post-mortem room at the Soho Hospital a case under the care of the late Dr. Squarey where during life a sound had, on more than one occasion, been passed through the fundus of the uterus; there were no signs of any inflammation in the neighbourhood of the wound or any peritonitis. The sound was passed through with the greatest ease in the specimen after its removal from the body, the opening being still freely open, but valvelike, admitting the passage of the sound readily from within but not from without. Dr. Grigg could not remember the exact condition of the uterus, but was under the impression there was some cancerous infiltration.

He subsequently writes to say that he remembers distinctly there was much ascitic fluid in the peritoneal cavity, which was due to cirrhosis of the liver, and believes he was mistaken in saying


b
d

there was any carcinoma of the uterus. The specimen, he thinks, is in Dr. Alfred Meadows' possession.

Dr. POTTER remembered some years ago meeting with a similar accident. In reducing a retroflexed uterus the sound passed through the wall of the uterus, and its point could be felt through the abdominal wall rather behind the umbilicus. The patient did not present any untoward symptoms in consequence.

Dr. PLAYFAIR exhibited a specimen of caries of the pelvic bones following delivery. The case was that of a woman who had been attended by a practitioner in the neighbourhood of King's College Hospital. It appeared that in two former labours she had been delivered by craniotomy. In the present labour the head seems to have been arrested at the pelvic brim, and an attempt at forceps delivery had been made. During this the patient had no doubt been injured, for, on admission into the hospital, the urine was found to be escaping from the vagina, from which some large portions of sloughing tissue were also discharged. The prominent condition, however, was very intense pneumonia of both lungs, probably of septicæmic origin, accompanied by much typhoid prostration; and this, after a protracted illness, proved fatal. On post-mortem examination, in addition to the evidence of pneumonia, the sacro-iliac synchondrosis on the left side was found to be in a carious condition, the cartilage being entirely destroyed, and the bones themselves extensively diseased. Dr. Playfair pointed out that in the fifteenth volume of the Society's 'Transactions' he had related a somewhat similar case in which the pubic bones were necrosed. The only similar instances he had been able to find recorded were two narrated by Trousseau in his 'Clinical Medicine,' who had referred them to an extension of peri-metritic inflammation to the bones. He had then suggested that the case was probably rather the result of septicæmia; and it seemed to him that this case bore out this view, for in it the existence of septicæmia could not be doubted. As this condition following delivery was so little known, it seemed to him a case worthy of being recorded.

Post-mortem (admitted February 15th, died March 19th, 1876).—*Lungs.*—Pleuritic adhesions on the left side, the left lung was consolidated and very much thickened interstitially throughout. The smaller air passages were almost obliterated, and the larger bronchi were much narrowed and compressed by the thickening of the fibrous tissue of the lung, weight 13 oz. Right lung very much engorged, weight 14 oz. Liver congested. Heart normal. Kidneys normal.

Special notes.—On opening the abdomen and examining the pelvic viscera, the uterus was found to be of its normal size and healthy; its appendages were also healthy. All the brim of the pelvis on the right side, and that part of the ilium which joins the sacrum, were found to be extensively necrosed, the ligaments and cartilages of the sacro-iliac synchondrosis having ulcerated away, and the sacrum, close to the synchondrosis, beginning to participate in the disease; the parts around were not much implicated.

On examining the vagina, no opening could be found into the seat of the disease, nor did matter from the dead bone penetrate any other viscus in the pelvis. A small sac of an abscess containing about 1 oz. of offensive pus was opened on the left side having communication with the surrounding parts. There was no apparent fistula from the urethra, which seemed normal. The vaginal walls were found to have sloughed superficially. The mucous membrane only seemed to have formed the slough. There were no communications with the vagina by which pus could have escaped from the site of the disease. The bones on the left side of the pelvis were healthy. The bladder was healthy.

Dr. HAYES mentioned having seen the case, and stated that there had been a cough previous to labour, and it was therefore uncertain whether the pneumonia was antecedent to delivery.

Dr. SNOW BECK asked in what part of the lung this reputed pneumonia was seated, what stethoscopic signs were noticed, and what character the expectoration presented. Dr. Playfair replied

rendering it difficult to obtain a thin section with a knife, but broke up very readily with the needle. This might be accounted for by the comparative if not absolute absence of the yellow element. The black line was pigment.—Dr. ROUTH.

A CONTRIBUTION TO THE STATISTICS OF MIDWIFERY IN GENERAL PRACTICE.

By HENRY COOPER ROSE, M.D., Hampstead.

BELIEVING as I do that carefully tabulated statistics of general practice furnish the best and most satisfactory materials from which to estimate the dangers and difficulties of obstetrics, I venture to bring before the Society the results of 1250 consecutive cases of labour which have occurred in my practice at Hampstead, with the hope that others of more extended experience may be induced to follow my example.

The majority of the cases have been amongst the well-to-do people, many amongst the affluent, and *none* amongst paupers or the very poor. I mention this fact to indicate that the mothers have all been *well nourished and carefully nursed*—two very important matters—and the general sanitary conditions have been mostly satisfactory.

In order not to occupy the time of the Society unduly I will first call attention to the subjoined statistical tables, and then I propose as succinctly as possible to add a few explanatory clauses.

TABLE I.

Total number of cases	1250
Primiparæ	199
Twins	17

Presentations.

Vertex	1209	
Breech	19	... 10 infants lived; 6 died during delivery; 3 were premature and were born, and dead when the doctor arrived.
Feet	7	... 9 infants lived out of the 12; 8 died; in 1 case the child was large and the pelvis small, and 1 was decomposing.
Foot	5	...
Arm	3	... 2 children died and 1 lived.
Side	1	... Child lived.
Knee	1	... Child lived.
Placenta	2	... Both children dead; 1 mother died; 1 recovered, well.
Foot and hand ...	1	... Child decomposing.
Face	1	... Child lived.
Face and hand ...	1	... Turning and ultimately craniotomy resorted to.
Total ...	1250	

Deaths.

Mothers	2	... 1 from puerperal convulsions; 1 from placenta prævia.
Children	41	

TABLE II.—*Complications.*

Malpresentations	40
Retained placenta	8
Post-partum hæmorrhage	21
Prolapse of funis	5
Puerperal convulsions	1
Total	75

TABLE III.—*Modes of delivery.*

Unaided except by simple manual traction	1231
Forceps	9
Turning	6
Craniotomy	4
Total	1250

TABLE IV.—*Results.*

Deaths.

Mothers	... 2	...	1 from puerperal convulsions; 1 suddenly, *after safe delivery*, from placenta prævia.
Infants	... 41	...	Stillborn.

On reference to Table I it will be found that 19 cases of breech presentation occurred in 1250 labours, or nearly 1 in 66. Of these 19 infants 10 lived, 6 died during delivery (and of these 6, 3 were first children), and 3 were premature and were born dead on the arrival of the doctor.

Of the 12 footling cases 9 infants lived, 2 died during delivery, and 1 was decomposed.

Of the 3 arm presentations, all of which were delivered by version, 2 were dead before the operation (1 decomposing), and 1 infant lived.

In the case of the side presenting, version was successful in saving the child, and the mother did well.

The case of knee presenting was converted into a footling case, and the child lived.

The *first case* of *placenta prævia* (No. 883) occurred in a patient thirty-eight years of age. She had had 12 children previously, and had never before suffered from any complication. A good deal of blood had been lost before I reached the patient, as she lived some distance off. Having satisfied myself that the infant was dead, I lost no time in delivering her. This I did by removing the placenta first, then turned and delivered the child. No further hæmorrhage took place, and the mother made an excellent recovery. I have since attended her with twins, and all went well.

In the *other case* of *placenta prævia* I had attended the same patient three years previously at the birth of a stillborn child. On that occasion, without any hæmorrhage, she was attacked after the birth with the most alarming syncope, associated with the sense of great oppression in

the chest, which lasted for several hours. Stimulants were freely resorted to, and perfect recovery to health took place. She was thirty-nine years of age and wore the aspect of health when this fatal confinement occurred. She had been pregnant 13 times, had had 7 children at full time, and had aborted 6 times.

At 10 a.m. she had a sudden gush of blood from the uterus unaccompanied by pain. Bleeding did not recur till 6 p.m., when I was hastily called to her aid. I found her rather faint, after having lost a good deal of blood. The os was dilating and dilatable, and labour pains had set in. Another gush of blood quickly recurring after my arrival, and placing the life of the patient in jeopardy, I immediately gave stimulants, introduced my hand between the placenta and cervix, thus into the uterus, ruptured the membranes, turned the child, bringing down one leg, and delivery quickly took place, the pains being expulsive and firm. Scarcely any blood was lost during the operation, which the patient bore well. I removed the placenta after the child was born, and applied a compress and bandage. At this time the patient was cheerful, expressed her thankfulness, had a chat with her husband, and everything appeared to be most satisfactory and the pulse fairly good. About an hour after delivery, without any further hæmorrhage either externally or internally, a sudden change came over her features, a convulsive twitching of the face followed, and she died instantly. No post-mortem examination took place. The child was stillborn.

The case of foot and head presentation was converted into a footling case; the child was decomposing.

The face presentation was a very tedious case, but both mother and child did well.

The last on the list, viz. face and hand presentation, resulted in version, and ultimately craniotomy. The mother did well.

Having considered the various malpresentations and their results, I will make a few brief observations upon the complications comprised in Table II.

There had been 8 cases of *retained placenta* requiring removal by the hand; in every case the patient has done well. I have been accustomed for many years to direct the nurse to place her hands on the uterus *during* and *after* the expulsion of the child, and in that way exercising compression until I have by slight traction on the cord removed the placenta. Since adopting this plan the cases of retained placenta and of post-partum hæmorrhage have been greatly reduced in frequency.

Of post-partum hæmorrhage there are 21 cases; 5 of these occurred very severely in the same patient, who was of hæmorrhagic diathesis. A month before her sixth and last labour I prescribed tannic acid in gr. v doses ter die. *No abnormal hæmorrhage* took place either during or after this labour. In Case 1152 the patient was a primipara, a delicate-looking woman, aged thirty-seven. After several hours of labour the pains ceased. Ergot had no effect. I applied the forceps and delivered her of one child, waited a short time, gave stimulants and ergot, and delivered her of a second child with the forceps; the head presented in both cases. Expulsive but feeble pains were immediately produced by traction. Pressure on the inert uterus aided expulsion of the placentæ. *Very severe* hæmorrhage commenced shortly after the placentæ came away, threatening the life of the patient. The cold-water douche poured on the belly from a height and pressure on the uterus exercised but little control over the loss of blood. I was not provided with a syringe and Liq. Ferri or I should have injected the uterus with it. I thrust my knuckles down firmly on the abdominal aorta so as completely to occlude it; the hæmorrhage *immediately stopped*, but recurred after lessening the pressure upon the artery. After maintaining the pressure for about twenty minutes the bleeding was completely arrested, and the patient recovered without a bad symptom and rapidly regained her strength. Both infants lived.

All the other cases of post-partum hæmorrhage did well, cold, ergot, and pressure over the uterus being the

treatment adopted. After the hæmorrhage ceased I gave full doses of opium in every case with marked benefit.

Of the 5 cases of prolapse of the funis 2 infants lived, 2 died, and 1 was associated with a case of craniotomy.

The only other complication was that of puerperal convulsions (No. 559). It occurred in rather a delicate woman, æt. 22, a few hours *after* her first labour, which was a perfectly natural one, commencing at 4 a.m. and terminating at 11 a.m. The patient had been in very low spirits for some months in consequence of a secret marriage, and also on account of her husband having procured a situation in rather a discreditable manner.

As soon as the convulsions commenced I gave chloroform, and kept her more or less under the influence of it for *eleven hours*. In the early stage the moment she partially recovered consciousness convulsions ensued; these immediately ceased on renewing the chloroform. They became, however, less and less frequent, and I had every reason to hope that she would quite recover. They ultimately *ceased*, and the chloroform was discontinued, but in spite of nourishment and care she sank sixty hours after delivery. The result of the chloroform was sufficiently satisfactory to induce me to give it a fair trial again should occasion offer. I believe mental emotion to have been the cause of the disease in this case. There was no albumen in the urine.

With reference to Table III, relating to the modes of delivery, no less than 1231 cases out of 1250 were terminated with no other aid than some manual traction in the footling and breech cases.

When the natural powers have failed to effect delivery in a reasonable time I have applied the forceps in 9 cases, in 3 cases where the head has been above the brim of the pelvis, and in 6 cases where the head has been down on the perineum. In all the cases the children have lived and the mothers have done well.

I have had recourse to turning six times; three *times* when the arm has presented, *twice* in cases of placenta

prævia, and once in a case of face and hand presentation which resulted in craniotomy.

Four times it has been necessary to perform craniotomy.

The first case was the one above mentioned, viz. the face and hand presentation. It happened in the third confinement of a lady in whom the promontory of the sacrum was very pronounced. Her first child was born prematurely and lived, having been delivered by forceps. The second child was delivered by craniotomy. As I could not deliver her with the forceps, turning was resorted to, and the body was brought down; the head, however, could not be extracted; the child being dead, craniotomy was immediately performed by passing the perforator through the occiput. The mother made an excellent recovery.

The second case happened in a woman, æt. 38, who had borne several living children at whose birth I had been present. This was her ninth labour. She had been many hours in pain, the head was impacted high up, and no progress had been made for some time. The patient was becoming exhausted, and I vainly endeavoured to deliver her by means of the forceps. I then sought the aid of a gentleman who had worthily obtained a reputation in the profession (now deceased). He tried the forceps and failed. Craniotomy was then performed. Unfortunately he failed sufficiently to disorganise the medulla oblongata, and after the child was born—(the head a shapeless mass)—some efforts to cry were made, which were partially successful! I immediately thrust my finger through the foramen magnum, when a convulsive shudder took place and no more movement occurred. The mother recovered from the labour, but died some months afterwards from pulmonary disease.

The third case occurred in a patient, æt. 30, who had had six living children without any complication. On this occasion there had been severe hæmorrhage soon after the labour began. When I saw her she was rather

exhausted, a large portion of the funis was compressed by the head of the child, and it had ceased to pulsate. Being satisfied of the death of the child, and failing to fix the forceps, I resorted to craniotomy. The mother recovered without a bad symptom.

The fourth case was of some interest and difficulty. It occurred in a woman, æt. 36, who had had nine children previously, and had always done well. There was no history of cancer in her family. I found on my arrival what appeared to be a bag of membranes, pyriform in outline, projecting through a very rigid os uteri patent to the extent of the size of a penny piece. The cervix was thickened, hard, and unyielding, evidently the seat of cancerous disease. The aspect of the patient was consonant with this view. I waited in vain for some time in the hope that dilatation of the cervix would take place. Not being able to distinguish the presentation I determined to rupture what very much resembled the membranes, but which turned out to be the soft decomposing scalp of a dead child. With very great difficulty and much danger of lacerating the cancerous cervix I managed to empty the uterus by means of the blunt hook. It was a work of much time and delicate manipulation. The patient perfectly recovered from the labour. I then lost sight of her, but she fortunately fell under the care of a professional friend of mine, who reported to me that she died some months afterwards of cancer of the uterus.

The child in this case was at about the seventh month of gestation.

The *results of practice* as far as the mothers are concerned may be considered fairly satisfactory. I have *never* lost more than two parturient patients, and these are accounted for in Table IV.

Forty-one seems a large number of stillborn children; many of these, however, can be accounted for. Nine were the result of breech presentation, at 3 of which no doctor was present, 3 were footling cases, in 1 of which

the child was decomposing, 2 resulted from arm presentation, 1 of which occurred in a primipara, æt. 39, with rigid os and perineum. The labour had been going on for some hours before I saw her, when of course I turned and delivered. In the other case the child had been dead for some days.

One mother (syphilitic and strumous) had 6 stillborn children in succession. I then succeeded with much difficulty in inducing her to undergo a long course of anti-syphilitic treatment. She afterwards had 3 living children in succession, and the children remained healthy. Three infants were destroyed by craniotomy, 3 others died from prolapse of the funis, 2 of which had ceased to pulsate before my arrival, and the other case was too far advanced to turn, and I could not secure the cord from pressure.

Twenty-six cases out of the 41 are thus accounted for. Of the remaining 15 stillborn infants I have no special record.

I have never had a case of puerperal fever in my own practice, but I relate the following cases to show how some patients escape in spite of their seeking destruction.

In the Case 1214 a child of the patient had erysipelas very badly, extending over the face and head. When I saw the mother she was far advanced in labour in *the same room* as the sick child lay. I remonstrated fiercely, but the infant was born before I could induce the mother to change her room. She had been assiduously nursing this child unknown to me up to this time. The next day I found the erysipelatous child in the same bed with the parturient mother! Entreaty and threats were of no avail. The child remained with the mother, who never had a bad symptom!

Another case is worthy of note. A wife was carefully nursing her husband who was suffering from scarlet fever up to the moment of being taken in labour. She was confined in a room just under that of her husband. She recovered without a bad symptom.

I may mention that I have met with several severe cases of rupture of the perineum, but never extending through the sphincter ani. They have uniformly done perfectly well without any other treatment than cleanliness and shielding the raw edges from irritating discharges with simple ointments. I have never found it necessary to use sutures.

There is one cause of retarded delivery which I have met with on several occasions, and which I do not think is sufficiently recognised, viz. the jambing of the anterior lip of the os uteri between the head of the child and the pubes of the mother. I have known violent efforts at expulsion to take place without the slightest progress being made until I had introduced two fingers into the vagina, and (with or without chloroform) during the interval of the pains carefully and steadily pushed the tumid lip of the os upwards and over the presenting head. The first stage of labour being thus completed, rapid and safe delivery has taken place.

No case is included in the above tables in which the child had not arrived at the period of gestation which would render it viable.

The PRESIDENT remarked upon the very small number of instrumental labours and the good results to the mothers. He thought the os as well as the soft parts should be dilated or dilatable before attempting to apply the forceps, and then they might be used with safety to both mother and child.

Dr. EDIS thought the paper one of great interest. The Society were much indebted to Dr. Rose for relating his experience, and others would do well to follow his example, for we were much in need of such experience to guide us as to when operative interference should be resorted to. With many practitioners the employment of forceps was looked upon as a *dernier ressort*. Dr. Edis had been called to cases where labour had continued for many days, where the application of forceps succeeded in terminating delivery in less than a quarter of an hour. It would be well if it were more generally known that in tedious and difficult cases of labour the danger was not in applying but in *not* applying forceps. Numberless children's lives were sacrificed

and the maternal risks greatly increased for want of timely assistance.

Dr. CLEVELAND thanked the author for laying before the Society the details of such a large amount of private practice. The first point in the paper with which he was struck was that alluded to by the President, viz. the few forceps cases; and he could not but think there was an important connection between this fact and the fifteen stillbirths that were not accounted for; in other words, he believed there would have been fewer dead children if instrumental aid had been more frequently resorted to. He agreed with Dr. Edis that it was most desirable there should be some general rule when forceps should be employed, but after all the benefit conferred by the instrument, as evidenced in the cases just related by Dr. Edis, must often depend more upon its skilful application than the period at which it is used. As regards rupture of the perineum he wished to point out that, in his experience, he considered the accident had frequently been prevented by exercising the greatest care in restraining, by sheer force, if necessary, the head from emerging at scarcely more than an imperceptible pace, so as to allow of the most gradual and complete dilatation; but added that he had found almost as much difference between the dilatability of a healthy young woman's perineum and that of an ill-nourished woman, advanced in years, as there is between india rubber and brown paper. He agreed with the author in the desirability of always maintaining careful guard and pressure over the uterus, after the birth of the child, but thought this was too important a duty to be entrusted to the nurse, whenever it could possibly be done by the accoucheur himself. With reference to the case of death after convulsions, he could not but think it must be attributed, in the absence of any other cause, to the unusually protracted period it was deemed necessary to keep the patient under chloroform.

Dr. PLAYFAIR said that the criticism he would venture to offer on Dr. Rose's paper, the value of which it was impossible not to admit, was with regard to the very point to which some would no doubt think his statistics specially merited approval, viz. his small proportion of instrumental deliveries. There was no subject in modern midwifery which to his mind was of greater importance, and none which was more worthy of discussion in the Society. There could be no doubt that Dr. Rose's practice in this respect was thoroughly orthodox, and was in accordance with the dicta of almost all our obstetric authorities, and therefore if he ventured to criticise it he was aware he was running counter to established authority. To his mind, however, the dread of early instrumental interference, and the assumed necessity of delaying it as long as possible, was a survival of erroneous teaching which often led to results much to be deplored. It was not so much a

question as regards the mother only as the child. No doubt, and he believed that of this there could be no question, the mother would make a better recovery if she was not allowed to drag on in many weary hours of labour. The question, however, more especially concerned the child. It would not be denied that it was the duty of the accoucheur to do all in his power to ensure the birth of a living child, and yet how seldom was this taken into consideration in the management of delivery. He observed that Dr. Rose applied the forceps about once in 138 cases, and his proportion of stillbirths were 1 in 30. This latter has been the average proportion in the general returns all over the country. Contrast these with the results of those who resorted much more frequently to instrumental delivery. Nothing is more remarkable in modern midwifery than the results published by Dr. Hamilton, of Falkirk, which has not attracted nearly sufficient attention. In one instance he had about 600 deliveries without losing a single child, and in another a series of 731, and he used the forceps in one out of every seven or eight cases. In the Rotunda Hospital at Dublin, where the practice was naturally the most skilful and scientific in the kingdom, the importance of early interference was recognised, as the forceps were applied with a frequency which would have horrified the past generation, and with the most favorable result. If such figures even approximated to the truth it was obvious that to a dread of early instrumental interference, an immense amount of preventable infantile mortality might be referred. Nor could there be any objection made to earlier interference, unless it could be shown that the maternal risks were increased by it, and this has never been done. Indeed, the application of the forceps when the head was arrested low down in the pelvic cavity, and resting on the perineum (and to such cases alone these observations refer), is amongst the simplest of operations. The high forceps operation, when the head is arrested at the pelvic brim, was a totally different affair, not now under consideration. In the hope, therefore, that these observations might lead to a discussion of this very important subject, he had made these criticisms on Dr. Rose's valuable paper, although in doing so he was aware that he was laying himself open to the accusation of teaching unsound and dangerous practice. But he taught it with confidence, feeling sure that time and experience would only prove its correctness.

Dr. B. Robertson inquired if there was any reason for not stitching up the perineum.

Dr. Westmacott thought the whalebone loop would often prove of service.

Dr. Snow Beck said if any one could draw up a code of rules which would serve as a guide for the application of the forceps he would be conferring a great benefit on all practitioners in

midwifery; but he believed it would be found by any one who attempted it impossible to attain. Each case presented a combination of symptoms, and facts peculiar to itself, and upon these symptoms the judgment and experience of the practitioners would have to decide. Much might also depend upon the tact of the individual in the application of the forceps, also the proper mode of using them when applied. Some general rules might be framed, but these would not be found of much use, if any, in actual practice. In some cases it was no doubt injurious to delay their application too long; in others it was equally injurious to apply them too early; and in all cases the decision must rest upon the judgment and experience of the gentleman in attendance. With reference to the employment of sutures in rupture of the perineum, he did not know of any reasons why they should be used; but he might give one or two reasons why they should *not* be applied. He had seen a great number of these cases; not that he thought they were more frequent in his practice than in that of others, but because he had specially examined into the question. He retained the opinion formerly expressed that in primipara the large majority suffered from laceration of the perineum up to the sphincter ani. And no means he had been enabled to employ or to devise had been successful in preventing this laceration. In soft fleshy distensible perinei laceration was almost invariable, and it was the thin parchment-like tissues that escaped being torn. Very often when carefully guarding the perineum and guiding the exit of the head he had felt certain no laceration had occurred, yet subsequent examination showed that tearing had taken place at the last moment when the head passed. For a long time he had always made some excuse and examined the parts by the eye as well as by the touch, and thus felt certain of the nature and extent of the mischief. Had he rested contented with all things being apparently comfortable, and the patient not making any complaint, in very many cases he would have felt certain the perineum had not been ruptured. With respect to the treatment, the only trouble he had had occurred in one case, where, being over-anxious, sutures were inserted. All the others healed readily and well. The tissues of the perineum are so lax for some days after parturition that the torn edges are easily brought into apposition and readily retained there, all that appears necessary being to bring the parts carefully together, to direct the attention of the nurse to the facts, to acquaint the patient that some tearing had occurred, and that it was necessary to avoid any movement for a few days, and to tie the knees loosely together as a precaution against unnecessary movement. When healing by the first intention does not take place, the edges generally granulate without much trouble. But if

these lacerations will heal without sutures being inserted, no doubt they will also heal after the sutures have been used. Still it is desirable to avoid them as being unnecessary, and as women evince much reluctance to have anything done to these parts after parturition, unless there be an absolute necessity for such interference, no doubt sometimes the laceration does not heal and the perineum remains open, even extending into the rectum. But without going into further particulars much of this absence of union appears to depend upon the want of care to keep the parts perfectly quiet the first few days after the tearing had occurred.

Dr. COOPER ROSE, in reply to the observations of Dr. Cleveland, did not think that the long continuance of the use of chloroform in the case of convulsions had anything to do with the death of the patient, seeing that she lived and appeared to be doing well for forty-nine hours after the use of chloroform had ceased. He rather regarded it as a case of collapse such as sometimes happened after severe operations or wherever the nervous system had suffered undue tension. With regard to the use of sutures in cases of perineal rupture, he was one of those who never liked to interfere where nature appeared to be sufficient of herself to effect a cure. Keeping the knees together with the bandage he found all that was necessary to secure good results. In reply to the remarks of Dr. Playfair upon the subject of the high rate of stillbirths, he reminded him that he had stated in the paper that no less than *six* were the syphilitic offspring of *one mother*, and after eliminating other unpreventable cases the number was greatly reduced—in fact, he believed it to be a fair example of the ordinary statistics of general obstetric practice. With regard to the more frequent use of forceps he stated that he had been brought up in a school where the golden maxim was inculcated that "*meddlesome midwifery is bad*," and that so long as the mother showed no signs of exhaustion, and the parts were neither hot nor dry, and the pains were propulsive, he had generally preferred patience to instruments. 1250 cases, however, extended over some years, and he would form a very poor opinion of any practitioner who, with extended experience, would still adhere to his original notions, and he was free to confess that cases might have occurred in earlier years in which, were they to happen again, he should unhesitatingly apply forceps; he was nevertheless perfectly satisfied with the results so far as the mothers were concerned. He thanked the Society for the kind attention they had given to his simple paper.

CASE OF PUERPERAL SEPTICÆMIA.

By Henry Gervis, M.D., F.R.C.P.,
OBSTETRIC PHYSICIAN TO ST. THOMAS'S HOSPITAL AND PHYSICIAN TO THE ROYAL MATERNITY CHARITY.

The following case possesses, I think, sufficient interest to make it worthy of record, having from the beginning to the end been under close observation at the hospital, so that every change of condition and all temperature variations, and ultimately the results of a post-mortem examination, could be accurately noted. In referring to the patient's daily condition I shall not trouble the Society with the details of treatment, unless when they partook of any exceptional character. A. B—, aged 36, was admitted into Adelaide ward October 20th, 1875. She had had five children, the youngest two years old. Being again pregnant she had been in attendance as an out-patient at the hospital for sickness, loss of appetite, and general debility, with an occasional hæmorrhage from the uterus threatening miscarriage. On the morning of the 20th, being then in the seventh month of pregnancy, she came to the hospital, and, while waiting in the out-patients' room, was seized with labour pains and speedily gave birth to a living male child, which survived rather more than an hour. She was removed at once to Adelaide ward, and the delivery was shortly afterwards completed by the expulsion of the placenta. The placenta was noted as being small and friable, and contained three opaque-walled cysts about the size of filberts filled with a transparent fluid. On subsequent inquiry there appeared, indeed, to be grounds for a suspicion of bygone syphilis, for she had had attacks of sore throat, had lost a good deal of her hair, and had some enlarged inguinal glands. There had been, however, no eruption, and her health prior to her recent pregnancy had been good. On the evening of the 20th, the day of the confinement, she

expressed herself as feeling comfortable, the temperature was 99·8°, her pulse 88.

October 21st, 9 a.m.—Complained of severe after-pains. Tongue clean; lochial discharge natural; temperature 101·6°, pulse 124. Towards the middle of the day she became feverish, thirsty, and excitable, and by night (9 p.m.) her temperature had risen to 104·5°, her pulse was 134 and she was complaining much of abdominal pain. Her tongue was looking red, and a little diarrhœa had occurred.

22nd, 9 a.m.—She had had a bad night, had been restless and at times delirious. The abdomen was much swollen and generally tender, but especially so in the hypogastric region, where the enlarged uterus could be felt rising some inches above the symphysis, its fundus inclining towards the right of the median line. Pressure on the uterus gave extreme pain. The tendency to diarrhœa had lessened; there was no sickness, but much thirst. The tongue dry and red. Although the local symptoms had so much increased, her temperature at the morning visit was barely 102°, and her pulse 120. Towards evening she became again more feverish, with a return of diarrhœa and a rise in the temperature to 104·6°, pulse 144. Tongue dry, red, and hard.

23rd, 9 a.m.—Had had but little sleep during the night, and had been very delirious. The abdomen was still more distended and the uterus, still extremely painful, rose to within one inch and a half of the umbilicus. The vagina was excessively hot and the lochial discharge, though scanty, free from any offensive character. In reporting this, however, it should be stated that the uterus had from the beginning been washed out two or three times daily with warm water to which Condy's fluid had been added. Tongue dry, red, and fissured. The diarrhœa very severe, highly offensive liquid motions running from the patient without her knowledge or control. She began, too, to be harassed by a dry hacking cough. The breasts were hard and painful; temperature 106·6°, pulse 130.

9 p.m.—She lay on her back with her knees drawn up, her face bedewed with moisture and wearing a most anxious expression. She was constantly wandering. The diarrhœa had ceased since the afternoon. Her temperature was 107°, pulse 155. A couple of hours later, at 11.30, it was determined to try the hypodermic injection of carbolic acid, and one third of a grain in solution was injected. By 3.30 the temperature had fallen to 104°, and the injection was repeated. At 6.30 it touched 102·4°.

24th, 9 a.m.—She had slept but little during the night, wandering almost incessantly, but by the morning was evidently somewhat better. She took nourishment well, had had no return of the diarrhœa, and the skin was moist.

9 p.m.—The carbolic-acid injection had been continued every four hours throughout the day. She had slept occasionally, but still wandered in the intervals. Her cough troubled her a good deal, and rhonchus was to be heard over both sides of the chest. Her temperature after falling to 102·4° at 6.30 a.m. as mentioned had risen again by 8 a.m. to 105°. The carbolic injection then administered failed to control it, and by midday it had reached nearly 107°. Thence, with fluctuations, it sank to 103° at 8 p.m.; the carbolic acid having been regularly injected every four hours, and since midday each injection was followed by at all events a temporary fall in temperature.

25th, 9 a.m.—She had a better night, slept more quietly, but was disturbed twice by diarrhœa. Complained in the morning of feeling chilly in her legs and of cramp in both calves. Had two or three attacks of dyspnœa. Her cough was troublesome and mucous râles were audible over both lungs. Uterus still enlarged and painful, and abdominal distension much the same.

9 p.m.—Throughout the day she was very restless and frequently delirious, but took her nourishment well. Her cough, however, was less and the uterine and abdominal

swelling and pain considerably less. The subcutaneous injection of carbolic acid was continued at intervals of four hours, and her temperature variations were as follows: At 12 p.m. her temperature stood at 106°, and the acid was then injected. At 4, when it was next used, it stood at 102·6°, and at 5.30 it was 101°. This was the lowest point touched during her illness. From this it rose again, until by 9.30, when the injection was next used, it touched 106°. Within a range of 3° it fluctuated a good deal up to 2 p.m., when it stood at 107°, and it was still at 107° when, at 4 o'clock, the acid was next injected. Within an hour of this it fell to 104°, but soon rose again to 106°, at 10 o'clock it was 104·5°, and at 12 p.m. 103·4°, the last injection of acid for the day having been at 10.

26th, 9 a.m.—She had a fair night under the influence of chloral. The general abdominal swelling was still less, but a circumscribed indurated swelling in the right groin began to make its appearance. Pulse 132.

9 p.m.—Throughout the day she took her nourishment well, but was often delirious. She frequently retched, twice she was sick. The cough still troublesome, but her breathing easier. The carbolic injections were still continued every four hours, but with less apparent influence on the temperature than previously. The highest point touched in the day was 106°, the lowest 103·4°. The average level for the day was 105°.

27th, 9 a.m.—She slept but little during the night and was constantly muttering. In the course of the day a patch of redness appeared on the inner side of the right knee, and the swelling in the groin which was noticed yesterday increased in size and extending downwards involved the right labium. Pulse continued about 136, and she took her nourishment well: this, indeed, almost up to the last, was the most favorable feature of her case.

At 1 a.m., when the carbolic injection was used, her temperature stood at 104°, and continued so to stand until 5 o'clock, when the next injection was used, at

which time it had reached 104·2°. Within an hour it fell to 103·8°, but then, with fluctuations, rose again, by 10 a.m., to 105·2°, and by 12 a.m. was 106·2°. Under these circumstances, the acid evidently now failing to influence the temperature, it was resolved to discontinue it as an injection, and continue it only as an internal medicine, in doses of one grain three times a day. The average temperature throughout the day was 104·4°, but at 12 p.m. it stood at 107°.

28th, 9 a.m.—She slept pretty well after a chloral draught, and her temperature this morning was 106·8°. Pulse 132. Bowels again a little relaxed, and troubled with frequent hiccup. The abdomen this morning was more distended and more painful, and the swelling of the right labium greater. Sibilant rhonchus over the whole chest. Pain in right knee increased.

9 p.m.—She was very incoherent the greater part of the day, and complained much of headache. No sickness and no diarrhœa. Pain in knee less. Temperature 104·8°. Pulse 160.

29th, 9 a.m.—There is extensive phlebitis affecting the right femoral vein and general œdema of the right leg, with increased swelling on the inner side of the right knee. Temperature 105°. Pulse 156, weaker.

9 p.m.—Has complained much of her head all day. Complained also much of the pain in her right thigh, and of pain about the left scapula. On examining the part a considerable swelling was found just within the vertebral border of the left scapula. At midday her temperature rose to 107°, but by the evening had fallen again to 104·6°. Pulse 140, very weak. The bowels during the day had been loose. Her breathing was easier, and dry sounds in the chest had again given place to moist ones.

30th, 9 a.m.—Had slept better, and this morning was less incoherent. The pain in the thigh was less, and the swellings about the scapula and knee much less. Her

chest symptoms, too, were much better. Temperature 104·8. Pulse 130, weak.

9 p.m.—She took some solid food for the first time to-day, a part of a mutton chop, and appeared to maintain the improvement of the morning. Her tongue was much less dry. The pain in the right thigh, however, continued very severe. Temperature 105°. Pulse 144.

31st, 9 a.m.—She slept badly, but otherwise still appeared to improve. Took her nourishment well, and complained less of the pain in the thigh. The swelling in the right labium was softer. Tongue moist. Temperature 103·6.°

9 p.m.—During the day she again retrograded. There was a return of diarrhœa. She rambled and muttered a good deal. Tongue again dry. Temperature 107°.

November 1st, 9 a.m.—She was somewhat better than on the preceding evening. Her temperature had fallen to 104·5°, and the bowels during the night had been open but once. The abdomen was somewhat tympanitic, but free from pain. There was some return, however, of chest symptoms.

9 p.m.—She rambled a good deal all day, but complained of the pain in the right leg being very severe. Bowels again relaxed. Headache much better. Temperature 102°. Pulse 132.

2nd, 9 a.m.—Patient slept fairly well the first part of the night, but rambled since early morning. The swelling on the back had quite disappeared, and that of the labium was less. Temperature 101·6°.

9 p.m.—The morning amendment was not maintained. At 12 a.m. she had a rigor and the temperature ran up to 107°, and continued nearly at that level the rest of the day.

3rd, 9 a.m.—She slept but little during the night, but perspired freely. Temperature this morning 104·7°. Pulse 138, very weak.

9 p.m.—In the middle of the day the temperature

again rose to 107·8°. At 4 p.m. it was 107°. At 9 p.m., 105·6°. At 4 p.m. she had a profuse perspiration. The bowels acted three times, the motions very offensive. She rambled almost incessantly.

4th.—She passed a better night, and in the morning the temperature had fallen to 104·8°, but by noon it had again for the third successive day reached 107°. By 3 p.m. she was perspiring freely, and by 8 p.m. her temperature was 105·6°. Pulse 136. She took nourishment fairly well. Her chief pain was referred to the right popliteal region.

5th.—Her temperature did not fall as usual in the early morning, being at 4 a.m. 107°, and at 8 a.m. 104·8°. She rambled the whole night; the bowels acted three times, motions still very offensive. Great pain in the popliteal region still complained of. Some subsultus tendinum. At 4.15 p.m. she had a distinct rigor lasting fully fifteen minutes. Temperature 5 p.m. 107°. 8 p.m., 105·8°. Pulse 148. Tongue, teeth, and lips covered with sordes.

6th.—She was very restless all night, slept but little, rambled continuously. Temperature at 8 a.m. 105·8°. At 12 a.m. 108°. At 12.45 p.m. 108·4°, the highest point yet registered. At 8 p.m. the temperature was 105·4°. Pulse 172. Subsultus and sordes increased. Two small sores had formed over the left buttock.

7th.—Bowels acted once in the night, motion most offensive. Mucous râles audible over whole of chest. Temperature at 8.30 a.m. 104·6°. At 12 a.m. 107·2°. Pulse scarcely perceptible.

8th.—Bowels still relaxed and dejections extremely offensive. Lips, teeth, and tongue covered with sordes. Both sides of chest dull on percussion, and very little vesicular breathing to be heard. Temperature at 8 a.m. 104·8°. At 8 p.m. 106·4°. Pulse 180.

9th.—During the day it was with much difficulty she could be got to take any nourishment, and all asthenic symptoms much increased. Temperature at 8 a.m.

105·8°. At 8 p.m. 108°. She died during the night at 3.23 a.m.

Post-mortem examination, November 11th.—Body well nourished, discoloration about the neck. Slight œdema of the legs. In right knee-joint several ounces of purulent fluid: a less quantity in left. Right labium majus swollen and occupied by an abscess running up along inguinal canal to the internal ring. A bedsore as large as the palm of the hand formed on left buttock, but not sloughed.

Thorax and lungs.—Inferior lobe of both lungs airless, except quite anteriorly. On posterior surface of each five or six embolic nodules of consolidation. One nodule in middle lobe of right lung. Nodules of different ages. Some deep reddish black throughout, others discoloured in central parts, none breaking down. Upper lobes crepitant throughout, œdematous posteriorly. In the arteries leading to the above nodules of consolidation white plugs appeared on section.

Pleura.—Right contains some turbid fluid tinged with blood. A thin layer of recent lymph on lower lobe posteriorly.

Heart flabby; valves healthy. Endocardium stained red. Small pale clot in right ventricle.

Abdomen.—Several adhesions between omentum and uterine appendages, but separable on traction. Ovarian veins on both sides greatly enlarged, being three quarters of an inch in diameter, and of a dark greenish-slate colour. Enlargement on right side extending up to vena cava; on left side to about two thirds of that distance. Round ligament on right side similarly enlarged throughout, and on incision found to contain thick curdy white pus similar to and continuous with that in the abscess in the right labium in which it terminated. Both ovarian veins were also full of pus. In the right it was limited above by a solid plug of fibrin; in the left by a pale fibrinous clot. There was also suppuration extending in the cellular tissue by the side of the uterus and vagina

on the left side. In the wall and thickened tissue about the left ovarian vein were small sinuous abscess cavities, communicating with the interior of the vein by narrow orifices. The endothelium of the veins was covered with a readily detached fibrinous membrane. The external iliac and the femoral veins were stained within and contained dark fluid blood, and a few small soft clots.

Uterus, large; surface pale; discoloured in parts. Cavity capacious, discoloured throughout. Placental area of the size of a crown piece, prominent and uneven. On section the tissue of wall white and healthy looking. Vessels normal, all free.

Ovaries healthy. Projecting above the right ovary was a sac containing pus, communicating with the purulent collection in the right round ligament.

Liver, flabby; bubbles of gas under the capsule.

Kidneys, large and flabby; cortex pale; capsules separating easily.

Spleen rather large; somewhat flabby. Four or five embolic patches showing on surface; wedge-shaped; pale in centre; abruptly defined. One small spot softened down.

Brain firm. Three or four ounces of fluid in cavity of arachnoid. Pia mater slightly opaque, with some excess of fluid in its meshes. Superficial veins distended posteriorly. On section a marked degree of reddening of grey matter of convolutions, presenting a mottled appearance; at some points the pink colour extending to adjacent white matter. Ventricles normal. Arteries at base healthy.

I have ventured to bring this case before the Society not on account of anything exceptional in its character, but because from the beginning to the end it was under close observation, and because it appears to me in every detail to be a typical case of a severe form of puerperal septicæmia—of that malady of childbed which I venture to think *par excellence* deserves the title of puerperal fever. A woman, not in good health, and the subject of mental depression on account of domestic troubles (and depression

of system whether mental or physical plays no small part as a predisposing element in all cases of puerperal septicæmia, for the better the general health the less is the susceptibility to toxic infection, and if it occur, the greater the chance of a favorable issue,) this woman is unexpectedly delivered in the waiting-room of the hospital, is then warded, and in the next bed to her, by an unfortunate mischance, is a patient suffering from pelvic abscess and septicæmia following a miscarriage. In less than twenty-four hours she is transferred to a small ward by herself, but within that period septic infection has occurred, she has abdominal pain, a temperature of 102° and a pulse of 124, and within thirty-six hours the temperature has still further risen to 104·5°, and the indications of periuterine inflammation are still more marked. And I may here mention that having recently gone through the records of all the cases of puerperal fever which have occurred in connection with the maternity department of St. Thomas's Hospital during the past five years, in none was there an absence of some indication more or less marked of inflammatory mischief, either pelvic or peritoneal. In many there was distinct and general peritonitis; in others the peritonitis was apparently limited to the fundus of the uterus or involved the peritoneal surface of one or other broad ligament, and when of but one more frequently of the left. In other cases, again, the peritonitis was but slight or transient, but parametric inflammation with effusion was more or less extensive. In the case just narrated and which is not included in the series published in the 'St. Thomas's Reports' there was no great amount of general peritonitis, or at all events what there was must have fairly well subsided under the treatment used, for at the autopsy beyond slight adhesions of the omentum to the uterus and appendages no peritoneal mischief was detected; while of pelvic cellulitis passing on to suppuration there was evidence only too ample. In this case again there was marked uterine enlargement, and more or less uterine enlargement is rarely absent, due either to congestion, or œdema, or

the effusions of metritis. This enlargement, indeed, is an important element in the prognosis; the greater the extent to which it proceeds, the more unfavorable is the prospect. I venture, however, to differ from Dr. Graily Hewitt in looking upon the uterine enlargement as a consequence rather than a cause of puerperal fever. A relaxed uterus doubtless predisposes to puerperal septicæmia in so far as it favours the formation of coagula which by their retention and decomposition may, under certain circumstances, lead to septic infection; but except in these cases, as a primary factor, the part it plays is, I think, but small. The swollen and tender uterus often falls to one or other side, and it did so in this case. At no period in this instance was there offensive lochia; and my experience of other cases would lead me to think that it is not so invariable a symptom as sometimes represented. It is generally, probably always, present at first in autogenetic cases where the sepsis has been developed within the parturient canal by decomposition of retained blood clot, or portion of placenta, or by the necrosis of a neoplasm; but much less certainly so in cases where the sepsis has been conveyed from without. It follows, too, that when once the case is taken in hand and the uterus washed out from time to time with disinfecting fluid the value of this symptom becomes still less, and so also the probability of the case becoming a source of infection to others. Two days after the delivery it was noted that the vagina was extremely hot and tender. Now, the starting-point of septicæmia may be at any part of the parturient passage where a breech of surface exists, whether it result from some chance laceration or from the normal detachment of the placenta; and so by primary toxic infection and then extension of inflammation, vaginitis, cervicitis and metritis separately or combined, come to be the earliest local indications of septic mischief. Since my attention has been directed to this point I have been struck with the large proportion of cases of puerperal fever in which one or more of the so-called "puerperal ulcers" can be detected in the vagina

within view of the vulval orifice. And I believe that where not so detected, in many more they may be presumed to exist in the upper portion of the canal, and more especially in connection with the cervix. And this cardinal fact in the history of septic cases explains much of the value of the irrigation of the surface with disinfecting fluids. Not only is the inflamed surface soothed by the application, but septic matters, whether brought there or produced there, are removed and, *pro tanto*, the risk of greater systemic intoxication diminished. That vaginal inflammation and ulceration is not more frequently noticed than it is, arises, I believe, from the obvious objection that exists to much digital examination of the passage; but in this case in spite of early washing-out of the uterus, so little systemic resistance to infection did the patient possess, and so sharp probably was the dose of poison she received, that from the vagina inflammation soon extended to the uterus, to its peritoneal covering, and to the connective tissue around it; the parametritis thus induced extended on the left side down towards the vulva in close proximity to the vagina, and on the right, separated the folds of the broad ligament and followed the track of the round ligament up to, through, and beyond the external ring. It is not impossible that had the mischief remained thus localised even if the parametric effusions had resulted, as they ultimately did, in suppuration, that the patient might have recovered. But we had nearly every possible sequela of septic infection to contend with—phlebitis affecting the right femoral and both spermatic veins; effusions of sero-purulent fluid to the extent of many ounces in both knee-joints; embolic mischief in both lungs, and concomitant consolidation œdema, and pleuritic effusion; congestion of the brain from quite an early period of the attack, and a temperature which for days together ranged about 107°. On the whole, I think, it speaks well for the resources of medicine that the battle was maintained from October 21st to November 9th. In the treatment adopted beyond the subcutaneous injection

of carbolic acid there was nothing of an exceptional character. It consisted chiefly in the large administration of quinine, and of remedies directed to the various symptoms which occurred, the diarrhœa, the sickness, the phlebitis, the cough. As regards the diarrhœa, when the motions are offensive, as in this case, I endeavour to moderate rather than wholly check it, considering the evacuations one channel by which elimination of the poison may be effected. Indeed, in some severe cases of septicæmia, both puerperal and non-puerperal, in which a favorable result has been obtained, I have known diarrhœa a prominent symptom throughout, and more than one writer has advocated purgation as the most reliable treatment. I have long been in the habit of using carbolic acid in one-grain doses every four or six hours, and have been well satisfied with its effect in checking sickness, relieving flatulence and tympany, and acting, I believe, generally in an antiseptic manner; but, until in this case, I had never used it by hypodermic injection with the hope by so doing of influencing temperature.

But there had been some cases of septicæmia in the surgical wards in which it had been so used with advantage, and I thought in this case to make trial of it. For two or three days it certainly appeared to have a good effect in lowering the temperature; within half an hour of its use there was a drop of from 1° to 3°, but after two or three days this result was either not obtained at all or without sufficient regularity to induce us longer to persevere. Possibly in a less severe case it might prove of greater service. The early peritonitis that occurred was treated mainly by the frequent application of turpentine to the lower abdomen and the administration of opium, and the treatment was apparently successful, for the acute abdominal tenderness and distension which set in almost at the outset of the case was speedily diminished, and but few traces were found post-mortem. In stating my belief that this case was a typical case of puerperal fever, and that puerperal fever is essentially puerperal septicæmia,

and is always associated with local inflammatory changes though not originating in them; that they, indeed, are but the local expressions of the toxæmia, a toxæmia in which the physiological condition of the blood plays no inconsiderable part as a predisposing factor; I should like to add a word or two, although apart from this case, on the question of the epidemiology of the disease and its connection with scarlatina.

At St. Thomas's Hospital we have rarely had a year without some few cases of puerperal fever. In the last five years I find from our Annual Reports there have been 21 well-marked cases, besides other slighter cases, details of which are not recorded. Of these 16 died and 5 recovered. As a rule, they occurred in groups of two, three, or four, and very constantly each group was connected with the practice of one attendant, and the further spread was apparently only checked by the prevention of attendance on other cases by any one who had been associated with an infective case. In the practice of medical friends I have seen several instances of a rapid succession of cases, some slight, some fatal within a few hours; and several instances also where the case has remained a solitary one, but whether one or many, whether in hospital or private practice, there has been almost invariably found on investigation the possibility at all events of septic infection in the initial case, and the moral certainty, where the malady has spread, of the communication of the poison from patient to patient by the attendant. My own experience, therefore, favours the view that puerperal fever is mainly, nowadays at all events, endemic, but in the belief that puerperal fever is puerperal septicæmia I see nothing to contradict the possibility, under certain circumstances, of its becoming epidemic also. That it is so so rarely is due to the fact that practically, if not theoretically, its connection with the transmission of septic agents is generally acted upon among us, and that the aggregation of women in lying-in hospitals is almost a thing of the past.

As regards the share scarlatina has in the production of puerperal fever, I cannot but think it more limited than is believed by some very distinguished authorities. If scarlatina attack a lying-in woman it is certainly a very fatal malady, and has in some of its features, as the high temperature and the tendency to delirium, a resemblance to puerperal septicæmia, but I fail to see the reason to call it anything but scarlatina any more than to call typhoid or icterus after delivery anything but typhoid or icterus. But I believe that scarlatina may sometimes be responsible for the origination of cases of puerperal fever, indirectly through the medium of the discharges from the throat, nose, and ears, and possibly also, as Dr. Tilt suggests, by inducing putrefactive changes in the lochia. Were not the influence of scarlatina thus limited, it appears to me that puerperal fever would scarcely ever be absent from any practice, and yet it must be within the knowledge of many that a medical man may be in attendance on a large number of cases of scarlatina, and yet have no case of puerperal trouble occur in his practice; that sometimes even scarlatina may be present in a house at the same time with a woman lying-in, and yet she escape unharmed; and I have known, indeed, of more than one case where a child with scarlatina has shared the same bed with a woman just delivered, and yet no symptom of puerperal trouble arise. But granted that the danger of scarlatina to puerperal women—apart from the possibility of communicating to them scarlatina simply—arises from the danger of septic infection from sloughy surfaces, and in this knowledge we gain at once confidence and safety.

I must, in conclusion, express my obligation to Mr. Joseph, lately our Resident Accoucheur at St. Thomas's, for his careful notes of the case, and for the interesting chart I have the honour to exhibit.

The discussion was adjourned until the next meeting of the Society, when Dr. WILTSHIRE proposed bringing forward a similar case.

JUNE 7TH, 1876.

WILLIAM O. PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

Present—44 Fellows and 7 visitors.

Books were presented by Professor C. Belluzzi, Dr. H. Beigel, Mr. J. C. Cullingworth, Dr. G. C. Engelmann, Professor Rizzoli, and St. Thomas's Hospital, and several old works, including 'Spigelii Opera,' 'Freind's History of Physic,' a collection of Edinburgh Theses, &c., were presented by Mr. T. Taylor, of Birmingham.

Donations were also received for the Museum from Dr. John A. Byrne, Dr. Wm. Goodell, Dr. A. J. Miles, Dr. Priestley, Dr. Rizzoli, Dr. Woodman, and the Messrs. Lollini, of Bologna.

Mr. M. Brunjes, M.R.C.S., Dr. F. H. Champneys, and Mr. G. A. Duke were admitted Fellows of the Society, and Mr. John Crew (Higham Ferrers) and Dr. Jude Hue (Rouen) were declared admitted.

The following gentlemen were elected Fellows of the Society:—Jos. R. Beck, M.D. (Indiana), Jul. Elischer, M.D. (Buda-Pesth), Henry Habgood, M.R.C.S. (Eastbourne), Charles Hammond, L.R.C.P., F. J. Marshall, M.R.C.S., W. M. Tredennick, M.D., and B. S. White, M.R.C.S. (Twickenham).

The following gentlemen were proposed for election :— Dr. C. F. Groom, Dr. John Haddon (Horncastle), Dr. S. Holden (Sudbury), Dr. J. A. Irwin (Manchester), Mr. Hor. Manders, Mr. R. H. Milson, Mr. E. J. Nix, Dr. F. Ogston, Junr. (Aberdeen), Dr. P. K. Picard, Dr. Samuel Sloan (Glasgow), Dr. H. B. L. Smith, Mr. F. Spurrell (Belvedere), and Mr. Wm. E. Stewart.

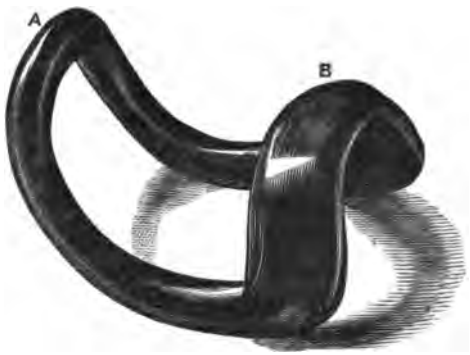
Dr. WILTSHIRE showed some specimens of vaseline, a new lubricant, to which various substances had been added, such as boracic acid, carbolic acid, thymol, oil of cloves, oxychloride of bismuth, &c., prepared by Mr. Martindale, of New Cavendish Street. The substance was not greasy. Some very convenient vulcanite jars were shown in which vaseline could be carried about.

Dr. BARNES had used the material and highly approved of it.

The PRESIDENT said he had used vaseline which had been sent to him by Messrs. J. Bell & Co., and he could testify to its cleanliness, but he doubted if it lubricated instruments as well as lard or oil.

Dr. GALABIN exhibited a new form of pessary. This was an attempt to extend to the treatment of anteversion or anteflexion the action of simple leverage which Hodge's pessary exerts in retroversion. In Hodge's pessary the fulcrum, which was formed by the grasp which the vaginal walls take of the instrument, was nearer the posterior end, but by altering the shape of a lever pessary the fulcrum might be brought nearer to the anterior end. In that case the anterior limb exerted a greater pressure upwards than the posterior, and the fundus would be pushed up, if it were in front. The tension of the posterior *cul-de-sac* constituted the power. In the instrument shown the posterior part was like that of Hodge's pessary, and, like it, rested behind the cervix. The anterior part was formed by a broad transverse arch, convex upward. This rested behind the pubes, in front

of the cervix, and pushed the fundus upward, while at the same time it stretched the anterior *cul-de-sac* upward, and so drew the cervix downward and forward. As com-



A, Posterior part, to distend the posterior vaginal *cul-de-sac* like the posterior part of Hodge's pessary; B, anterior arch, to rest in front of the cervix and behind the pubes.

pared with the cradle pessary or Thomas's pessary, this instrument had the advantage that it did not obstruct the vagina, not occupying any part of its outlet or lower portion, and therefore was suitable for married women. It could be combined, if necessary, with an intra-uterine stem.

The PRESIDENT remarked that obstetricians would be grateful to any one who would suggest a really efficient support for an anteflexed fundus. He knew of no instrument at present excepting intra-uterine stems, which on many grounds were objectionable.

The PRESIDENT then showed a photograph from a portrait of the late W. J. West, who first performed ovariotomy in England, which had been presented to the Society.

FIBROID UTERUS.

DR. CHAMBERS exhibited a specimen which he had watched through various phases. The patient, from

whom it was removed *post-mortem*, was 56 years old. She had suffered from severe and frequent losses of blood for seven years. The os and cervix had been divided, with relief to the hæmorrhage. The tumour extended above the umbilicus, the abdominal circumference being over forty inches; a profuse muco-purulent discharge had been a prominent symptom. Dr. Aveling's gynæcometer had been employed to demonstrate the alterations in the bulk of the tumour, which weighed two and a quarter pounds. On examination *post-mortem* the broad ligaments were found to be quite free, but the tumour was very closely attached to the pelvic fascia.

The PRESIDENT remarked that the specimen of Dr. Chambers illustrated a portion of the pathological history of hypertrophies of the unimpregnated uterus, which had received but little notice. No doubt some of the hypertrophies were so hard and dense that little variation was remarked at short intervals in their size. But there were also a large number of instances in which the enlargement of the womb underwent considerable variation, and the structure seemed of so spongy a character, that there was a perceptible increase in bulk with the return of each catamenial period. About the climacteric period the uterus was often so considerably increased in size as to give the impression of permanent fibroid growth, and yet the organ slowly and spontaneously returned to its normal size when the "change of life" was completed. To some extent it was probable that this accounted for the success of the treatment by absorbent remedies and of Kreuznach water.

Dr. SNOW BECK inquired as to the treatment, local and general, that had been employed, and what it was that the patient died of.

Dr. CHAMBERS explained that the patient died of uræmia. The treatment extended over six years, and was varied and complicated, the uterus being injected with carbolic acid, nitrate of silver, iodine, &c.

Dr. ROUTH said Dr. Chambers' interesting case called especial attention to one of the modes of cure, by incising the os freely in cases of fibroid tumours. This plan, originally suggested by the late Mr. Baker Brown, although practised synchronously by Sir J. Simpson, Hardy, McClintock, and others, he regretted he did not from his own experience look upon as always effective. It occasionally, as in this case, arrested hæmorrhage, yet not invariably, but unfortunately, it sometimes recurred at

the end of three or four months. On the other hand, he believed it sometimes, exactly as in this case also, led to a diminution of the size of the tumour, but these patients generally passed through a state of intense danger, peritonitis, &c., and often were in great jeopardy of their lives. If they recovered from this state, then often the tumour was found to have greatly diminished in size. The difference in the effect produced of the two kinds of cases mentioned after incision of the os was that, in the former, the *os only* was cut, in the second the *os* and *a part* of *the tumour*. This led to partial necrosis of the tumour, fetid discharges, and poisoning by absorption at the cut edges of the os. Clearly, therefore, the treatment indicated was to open the os first, taking care not to wound the tumour till the edges of the cut os had healed; a plan he had carried on for years, originally recommended and carried out by Dr. Scott of San Francisco, was to dilate by a tent, and then stuff the uterus tightly with lint dipped in iodine. This was kept in for forty-eight hours, and the effect of softening in some cases was marvellous. It had to be repeated several times and in this manner the tumour often greatly diminished in size. He had subsequently used the Liq. Ferri Persulph., and the Tr. Ferri Perchlor., with similar good results. Some years ago he had used the nitrate of mercury solution, now practised by Dr. de Goriquer Griffith also; but it had induced so often salivation that he preferred the nitric acid pure, put up in utero on a wire covered with cotton from periods varying from five minutes to two hours. These measures he found often effectual in reducing the size of a fibroid, and we must say fibroid tumours of the uterus were now almost an epidemic. But it was with the very large tumours about the size of a seven months' child, or even larger than a child at full period, that there was difficulty. It was too hazardous to act in this manner upon a tumour with a cavity of seven or eight inches long. His attempts with these had produced the greatest danger. Interfere we cannot, as the patient would flood to death in the long run. The treatment of such cases was still an opprobrium of surgery. He hoped some day to make them the subject of a paper. To cut such cases in the manner done by Dr. Chambers in his case was too dangerous a proceeding.

Dr. Heywood Smith inquired whether Dr. Routh referred to division of the cervix uteri or of the capsule, and whether any attempt had been made to enucleate the tumour.

Dr. Wynn Williams stated that he was called in to a very similar case some year and a half ago, where the patient nearly lost her life from the great amount of hæmorrhage; he divided the os uteri on either side, and after dilatation made a very free incision into the substance of the tumour. The hæmorrhage entirely ceased, and although she has since menstruated regularly, there has only been an ordinary amount of discharge. He acci-

dentally met the patient the other day, who appeared to be in perfect health, and said she wished to consult him as to whether she could safely re-enter the state of matrimony, she being a young widow. He should like to hear some remarks made by those of the fellows who have had recourse to the treatment of these tumours by the actual cautery; he heard Dr. Meadows speak highly of it in a paper read before another society. Dr. Routh and others also have had experience in this matter.

Dr. GERVIS remarked that, although of course it was easy to be wise after the event, he would like to ask Dr. Chambers what were the contraindications to enucleation. From the view obtainable of the specimen exhibited it appeared to be a case of intra-uterine fibroid with the capsule adherent more or less to the uterine interior, but not to such an extent as to prevent separation of the adhesions and subsequent removal of the tumour by successive sections.

Mr. SCOTT observed that the tumour was a large ordinary fibroid enclosed in its own capsule, and it would be instructive to see how far it could be enucleated without injury to the uterine tissue. In many of these cases, Mr. Scott believed enucleation might be practised with safety; in others atrophy of the uterine wall in connection with the tumour occurred to a great extent, and no measurement of the free wall by Dr. Aveling's instrument would give any reliable information.

Dr. CHAMBERS explained that the first division had been very free, part of the capsule being divided. On careful examination of the patient whilst under chloroform he came to the conclusion that, under the circumstances, the patient would not be benefited by its removal.

THERMO-CAUTERY.

DR. OSCAR PREVOT, of Moscow, exhibited a newly constructed instrument, invented by Dr. Paquelin, of Paris. The vapour of petroleum being driven through the handle to the tip of the platina stem, which has been first gently heated, the bulb becomes incandescent, and may be kept so as long as the vapour is supplied by means of an india-rubber ball, similar to that used by Dr. Richardson's spray-producer. In place of the bulbous extremity, others shaped in the form of a bistoury, &c.,

could be employed. The instrument was both ingenious and valuable, being very portable, easily got ready for use, and produced a very little radiation. It could be used in all cases where the actual, or gas, or galvanic cautery would be employed.

The PRESIDENT thought it would be very useful for destroying vascular tumours of the urethra, &c.

Dr. WILTSHIRE considered it most remarkable that the vapour should keep up the heat, even when buried in the tissues. The instrument was very inexpensive, the whole affair costing only a hundred and twenty francs. It was constructed by Messrs. Charrière of Paris.

[An abstract of Dr. GERVIS's paper, which was read at the previous meeting, was then read.]

NOTES OF A CASE OF PUERPERAL SEPTICÆMIA WITH ABSCESSES, DISORGANISATION OF THE LEFT WRIST-JOINT, AND PHLEGMASIA DOLENS IN WHICH RECOVERY TOOK PLACE.

By ALFRED WILTSHIRE, M.D., M.R.C.P. Lond.,

JOINT LECTURER ON MIDWIFERY AT ST. MARY'S HOSPITAL; LETTSOMIAN LECTURER TO THE MEDICAL SOCIETY OF LONDON; FORMERLY MEDICAL INSPECTOR TO H.M. PRIVY COUNCIL.

THE following case is brought forward as a pendent to Dr. Gervis's case of puerperal septicæmia, and is remarkable as an instance of recovery from serious lesions.

The etiology of the case is also interesting as exemplifying the injurious influence of unhealthy environments on puerperal patients.

The case was seen by me in consultation with Dr. Hammond, of George Street, Portman Square, to whom I am indebted for several particulars.

Mrs. F—, æt 30, was delivered of her first child on December 7th, 1874, after an ordinary labour. Though there was less than usual post-partum hæmorrhage Dr. Hammond remarked that she seemed unduly low and fainted after delivery, but nothing else very noteworthy occurred until about the third day when she vomited, and perspired abundantly. The pulse was then 100. Dr. Hammond gave her bark and acid, and ordered vaginal injections of Condy's fluid.

On the following day the pulse was 120, and the skin hot and dry.

On the 13th there was some hæmorrhage with clots.

On the 14th the condition became so alarming that I was asked by Dr. Hammond to see the case with him. When I saw Mrs. F— her pulse was 140. Temperature 105. Skin pungent. Respiration very quick. Moist and sibilant râles, mixed, were heard all over chest. Hiccough was troublesome. Aphthæ on mucous membrane of the mouth. Distension of the abdomen, and some swelling and tenderness of the left wrist-joint.

The condition seemed exceedingly grave and a guarded prognosis was given. Quinine and port wine were prescribed, and it was advised that a search should be made at least daily for superficial abscesses. Turpentine was used freely.

On the following day the patient was very drowsy and had a rigor.

Two days after the pulse and temperature were reduced, but rigors returned, the wrist became more swollen, and an abscess was found on the outer aspect of the right calf.

The temperature was again very high, 105° and upwards; and the general condition serious.

The patient fluctuated very much for days, sometimes improving considerably and then getting a sudden relapse with rapid elevation of temperature and other unfavorable symptoms. Abscesses which formed on the right leg were opened from time to time.

The patient went on in this fluctuating condition for a

month, when phlegmasia dolens affecting the whole of the left lower limb suddenly appeared.

At this time I was again asked to see Mrs. F— with Dr. Hammond. I found her very ill, but with a cheeriness of spirit which was encouraging, as it was under the circumstances remarkable. The left leg from the groin downwards was immensely swollen, white, and tensely elastic. There was an open abscess on the right leg. The left wrist-joint was utterly disorganised, the bones grating audibly on movement. There was profuse sweating, and extreme prostration accompanied the drenching perspirations.

The patient's state now seemed graver than ever, but from past experience of her recuperative powers we were encouraged to hope that she might survive. Every effort was accordingly made to save her, and I believe that she owes her recovery to the unremitting and skilful attention bestowed upon her by Dr. Hammond. By my advice, urgently pressed it is true, the swelling of the disorganised wrist-joint, which had now become considerable, was not opened, though I urged that all other collections of pus should be promptly evacuated.

In spite of relapses, at first unaccountable, the patient mended, and at last, after an illness of unusual severity, was able to be removed to the seaside three months after delivery, where she gradually recovered.

The cause of the sudden and alarming relapses was for some time a mystery, and, had not the patient survived for so long, would probably never have been discovered. The recognition of it was alike significant and instructive. It was found that the relapses accompanied by a sudden rise in the temperature invariably coincided with the emptying of the dustbin, and as the husband was in a large way of business as a grocer this was usually of weekly occurrence. The sweepings-out of a grocer's shop, added to the refuse that ordinarily finds its way into the dustbin of most inhabited houses, would probably form a compound peculiarly prone to undergo putrefactive fer-

mentation. At any rate, disturbance of the contents of the dustbin so befouled the air that the patient invariably showed symptoms of a renewed accession of poison every time the refuse was removed.

In the light of these facts it becomes a matter of extreme probability that the illness was originally started by poison derived from the same source.

I have seen other cases bearing out this view, notably one seen in consultation with Mr. Bannister, that of a lady who died a few days after delivery of typhoid symptoms arising from the disturbance of a water-closet and lavatory in the upper part of the house which had got out of order. A servant who slept near the closet also suffered similarly.

I should like to express my sense of the great value of quinine in the case seen in consultation with Dr. Hammond. I believe the patient owes her recovery to it. It is in such cases as these—cases, that is, in which there is great elevation of temperature with diffuse suppuration—that quinine is peculiarly valuable. It seems to me to reduce the temperature in a manner that it fails to do when the hyperpyrexia is due to blood-poisoning unattended by suppuration or ichoræmia. In that case I regard cold as more efficient in the reduction of temperature, quinine being by comparison feeble.

Some sixteen months have elapsed since Mrs. F— was confined, and she has now regained movement in her wrist-joint to a very gratifying degree. The child did not suffer in any way. That this was not a case arising from infection appears probable from the fact that Dr. Hammond had no other similar case in his practice, nor had he previously been in attendance upon cases of scarlet fever, erysipelas, or the like; nor had he recently attended or made a post-mortem examination.

The PRESIDENT remarked that, last session, a very exhaustive discussion on this subject took place before the Society. He would suggest, therefore, that it would be well, in the present

instance, to limit the discussion to the symptomatology and treatment.

Dr. EDIS referred to a case of septicæmia occurring in a patient in consequence of a miscarriage about the fourth month, where, owing to the uterus being retroflexed, there was considerable difficulty in removing the whole of the ovum. The uterus was regularly and carefully washed out for the first few days, as long as any *débris* remained, but spite of this, febrile symptoms ensued, abscesses formed in various parts of the body, contraction of the left hip took place, and the patient was reduced to a mere skeleton. Large doses of quinine together with the hypodermic injection of morphia proved of most value as regards treatment, and after struggling on for over three months the patient recovered sufficiently to be able to leave the country.

Dr. BRAXTON HICKS believed there was nothing like large doses of quinine, five to ten grains every four hours for three or four days. He had never tried the injection of carbolic acid. He thought the fact of there having been an offensive discharge in Dr. Gervis's case was not sufficient to account for the septicæmia, as many patients had the former without the latter. Other cases were also alluded to, arising from various causes, showing that septicæmia might depend upon numberless different exciting causes.

Dr. REDMOND alluded to a case where quinine had been given in fifteen-grain doses night and morning. As to puerperal fever following offensive discharges, we seldom found it resulting from severe operations in midwifery.

Dr. CHALMERS agreed with Dr. Braxton Hicks that a wider view must be taken of the causation of puerperal fever than that which was generally adopted. In several cases which had, within the last two years, come under his own notice, a variety of causes apparently were at work, such as a nurse in attendance with sore throat, and probably scarlet fever, or the medical attendant bringing infection from a former case; the depression and disturbance produced by the patient witnessing another seized with a severe epileptic fit in the lying-in room. Again, the presence of a person suffering from putrefying sores in the same house with the puerperal woman, and notably two other cases in which, without any very apparent cause severe symptoms set in within four or five hours after delivery, and where the disease went on to death without any abatement of the symptoms. Such cases as these seemed to the speaker to point to an origin other than the common one of septicæmia from putrefying matter in the uterus. As to treatment he considered such cases as Dr. Wiltshire's exceedingly valuable and encouraging to the general practitioner, who was perhaps too apt to consider the severe forms of puerperal fever as hopeless, and to disregard remedial measures accordingly. But the great difficulty those practising amongst

the poorer classes had to contend with was ignorance about the ordinary laws of health, disregard of cleanliness for the lying-in woman, and even gross prejudice in favour of filthy conditions which constantly endanger her life—all of which make one wonder not that so many die of puerperal disease, but that so few do so. Wherever recovery occurred amongst his own cases it always was where the nurse was intelligent enough and willing to carry out such instructions as were thought necessary for the recovery of the patient.

Dr. BRUNTON remarked that, though he practised in the same neighbourhood, he had not met with any cases of puerperal fever in his own practice.

Dr. CHALMERS said he knew of several cases in the practice of other medical men in the neighbourhood.

Dr. HAYES would not go so far as to say that puerperal fever with a healthy lochial discharge did not occur, but he thought such a thing to be extremely rare. He had met with cases in which it was said that the discharge was natural, but a close examination had shown that this was not so; indeed, in one such case that the discharge was extremely fetid. Again, it might be suppressed, or rather retained in the uterus, and the closest examination might almost fail to detect the fœtor. He referred to such a case which presented alarming symptoms of blood poisoning. The lochia were absent, and it was only by the introduction of the finger into the os uteri that faint fœtor was detected, but, on the injection of disinfecting fluid, a horribly fetid accumulation was washed out. The uterus was large, and playing the part of a cesspool, in poisoning the patient. He deprecated the custom of accepting the statements of nurses or patients on such a point. One must examine for himself. Regarding treatment he saw little to support the notion that quinine, turpentine, carbolic acid, &c., exerted a specific action. Quinine and other tonics were of great value in enabling patients to bear the strain of the attack. He strongly urged the employment of intra-uterine disinfectant injections, but they must be used frequently, and on each occasion continued till the returning fluid was unaltered. They should not be laid aside till all offensive odour had disappeared from the lochia.

Dr. WYNN WILLIAMS said he was just about to rise when the last speaker, Dr. Hayes, rose, who had so well expressed his views upon the subject that he need not detain the Society long. The Fellows would readily recognise that the remarks made exactly coincided with those made by himself at the time of the late discussion, and it was gratifying to him to find so many expressing the same views. He need scarcely say that he was quite in accord with the author of the paper. As to the remarks made by Dr. Hicks they proved nothing either one way or the other; they merely went to show that

when scarlet fever was prevalent puerperal fever or septicæmia was likely to be so. Also he asked who doubted it? The question is, what is the source of the infection? The putrid discharge from sore throats and abscesses and the fetid discharges from erysipelas, this he believed, as he had often said before, to be the origin of the septic poison. Dr. Hicks in his remarks had shown clearly that some women took scarlet fever in the ordinary form, others puerperal fever or septicæmia. The latter cases were due to the septic poison, the former to the true scarlet fever poison. As to the surprise expressed by different speakers at there being septicæmia without any fetid discharge from the vagina and other organs, in other cases that there should be offensive discharges without septicæmia, he could not help expressing his astonishment at their surprise. Which was most likely to happen—septicæmia from offensive putrid matter, with a free exit as through the vagina, or when pent up in the uterus? Let them ask the surgeon which is most likely to be followed by septicæmia, an abscess containing putrid matter pent up, or one with a free opening? He would relate one instance. He was called in to a case of so-called puerperal fever. He was assured both by the surgeon in attendance and nurse that there was no offensive smell, and there really did not appear to be any, but on examination he found a long thin piece of the membrane left in the uterus which had become putrid, and was the source of the infection. On removing it and washing out the uterus with iodine the patient made a very speedy recovery. As to the action of quinine in cases of septicæmia he could not understand how it could have any specific effect. By lowering the temperature and thus husbanding the strength of the patient by the preservation of fuel he could well understand its being of great service, enabling the patient to withstand the force of the poison, and thus giving nature time to throw it off.

Dr. Gervis, in reply, wished simply to correct a misapprehension which had occurred in Dr. Hicks's remarks. He (Dr. Gervis) by no means looked upon offensive discharges as the sole factor in the production of puerperal fever. They were but one factor in one class of cases. He had brought forward the case, not with any wish to introduce any further discussion on puerperal fever generally, but thinking the case a typical one and worthy of permanent record, and to elicit the experience of other Fellows on the treatment of carbolic acid, the exact significance of the enlarged condition of the uterus which existed in the early stages, and the relation of puerperal septicæmia to scarlatina.

Dr. Wiltshire thought that, in cases of hyperpyrexia, quinine was very valuable when it was due to purulent collections, but useless in ichoræmic cases. Therapeutics were too much neglected, to the disadvantage of the patient and the discredit of the profession.

JULY 5TH, 1876.

WILLIAM O. PRIESTLEY, M.D., F.R.C.P., President, in the chair.

Present—38 Fellows and 6 visitors.

Books were presented by Dr. P. F. Mundé, Dr. Isaac E. Taylor, Dr. G. Sirignano, Dr. Stadfeldt, and Mr. Thomas Taylor.

The following gentlemen were admitted Fellows of the Society:—Charles Hammond, L.R.C.P. Lond., Frederick W. Spurgin, L.R.C.P. Ed., J. Penning Baker, M.R.C.S., W. M. Tredennick, M.D., Godfrey A. Horsman, L.S.A., and John Gill, M.D.; and George M. Sharpe, L.F.P.S. Glasg. (Hunslet, Leeds), was declared admitted.

The following gentlemen were elected Fellows:—Charles F. Groom, M.D., John Hadden, M.D. (Horncastle), Sinclair Holden, M.D. (Sudbury), John A. Brown, M.B. (Manchester), Horace Manders, M.R.C.S., Richard H. Milson, M.R.C.S., Edward James Nix, L.R.C.P. Ed., Francis Ogston, M.D. (Aberdeen), P. Kirkpatrick Picard, M.D., Samuel Sloan, M.D. (Glasgow), Henry B. Liddell Smith, M.B., Flaxman Spurrell, L.R.C.P. Ed. (Belvedere), and William E. Stewart, M.R.C.S.

The following gentlemen were proposed for election:—Mr. M. H. L. Allen, Mr. Richard Farncombe, Mr. John Garner (Birmingham), Mr. Frederick E. Manby (Wolver-

hampton), Dr. Thomas Millman (Ontario), Mr. James Newham, Dr. Joseph Quirke (Handsworth), Mr. E. G. Carruthers Snell, and Mr. H. B. Spurgin (Northampton).

THE BLUNT HOOK.

THE blunt hook exhibited at the Conversazione of the Royal College of Physicians 28th of March, 1866, by Dr. T. Lazarewitch, is now considerably modified.

The instrument is 11½ inches in length; bent at both ends in the same direction and rounded at the points. One hook is adapted for replacing the funis, the other for extracting the child by the thigh, for placing the silk tape round the thigh, and for placing a plaited silk noose over the child's foot.

Holding the instrument in one hand, the hook is introduced, directing it with the fingers of the other hand, and placed over the thigh. I find by this means the extremity of the hook may be kept at some distance from the abdomen and turned to the inner part of the thigh. In this manner any injuries to the abdomen, the groin, and the genitals may be avoided.

The larger hook is adapted for passing the silk tape over the groin. The hook is inserted into a pocket near the loop at the extremity of the plaited silk tape. When the loop is drawn by the forefinger between the thighs, the hook is removed. Extraction by the breech with the silk tape, as Professor Hecker advises, may sometimes be successfully effected, or may serve as an auxiliary to other methods of extraction.

This hook is employed in the following manner for placing the silk noose over the child's foot. It is inserted into a pocket to which a loop is attached. When the hook with the noose is placed on the child's foot, the

noose is drawn over the foot and the instrument is removed.

For replacing the funis a double silk thread is passed through two eyes made in the smaller hook. Into the loop thus formed between the two eyes the prolapsed funis is drawn. The funis thus held in the loop is introduced into the cavum uteri; the thread is withdrawn, and the instrument removed.

Dr. GODSON had had occasion at a former meeting of the Society to call attention to the danger consequent on the use of the blunt hook bearing the name of Professor Lazarewitch. He was glad to find that Dr. Lazarewitch himself had discarded it, and substituted for it a hook with a curve. It was evident from this change that he had himself discovered the imperfection of the old form of instrument. He hoped this would never be again used.

CASE OF HYPERTROPHY OF SPLEEN AND LIVER IN A CHILD NINE YEARS OLD.

By Dr. JAMES W. J. OSWALD.

L. F. P—, æt. 9, has been under my observation for over six years. During one month of this time she was under the care and treatment of Dr. Hayes at the Evelina Hospital, and five weeks under the care of Dr. Wynn Williams at the Samaritan Hospital, when she was discharged as being quite incurable.

I saw the child occasionally after she left the hospital, and during the last week of her life I was in constant attendance upon her. From early childhood a swelling was discovered which continued increasing in size, and when I first saw her it had assumed a considerable size, occupying the greater part of the abdomen. The child was strumous. Towards the close of the girl's life she

became greatly emaciated, and the last week the lower extremities became very œdematous. The measurement round the abdomen at its greatest part was thirty-three inches.

On opening the abdomen about a quart of serous fluid escaped, the spleen and liver occupying nearly the whole of the space. The spleen was firmly adherent to the peritoneum. The intestines were in many places matted together. The liver had the colon fixed to its under surface. Kidneys large and white. Tubercular deposit in both lungs.

There is now a boy 6½ years old similarly affected, and the enlargement is steadily increasing, palliative treatment only being used in order to relieve the boy from the severe pain from which he suffers.

Dr. WILTSHIRE inquired as to the nature of the enlargement; whether there was any history of syphilis, or of chronic suppuration, or of tubercle, obsolete or with cavities. It looked as if it were a case of albumenoid infiltration. He would suggest the desirability of a microscopic examination.

Dr. WYNN WILLIAMS said it was quite true that the child had been under his care at the Samaritan Hospital, but that it was not quite correct to say that she was dismissed as incurable, as she and her brother, who was suffering from precisely the same malady, were sent from the hospital on account of an outbreak of scarlet fever. He remembered the case well; there was enormous protrusion of the abdomen, due to the great enlargement of spleen and liver. The cause of this enlargement was very obscure. He certainly got an admission from her father that he had syphilis before his marriage; this was shortly before the children left; and he said he was more inclined to set the disease down to some malarious influence, more especially as he had seen somewhat similar cases amongst children residing in the vicinity of the deep cuttings when the Underground Railway was in progress of being made. He had, however, been unable to trace such influences in these cases. The children had not rickets.

Dr. Barnes recorded the further history of a case which was reported in the last volume of the 'Obstetrical Transactions,' p. 216.

On the 10th June, 1875, he had removed by gastrotomy a conglomerate of colloid tumours weighing twenty-eight pounds. On that occasion a smaller tumour quite distinct from the main mass was seen between the spleen and the left kidney.

The connections with surrounding structures seemed so intimate and the patient had been so long under operation that it was not thought prudent to attempt the removal of it. The patient recovered as reported; but some months later she again increased in size, and in May of the present year (1876) the alternative presented itself of either leaving her to her fate or of resorting to another operation. The patient's courage being equal to the occasion, on the 22nd May, with the assistance of Dr. Chambers, I removed another conglomerate nearly as large as the first; it weighed twenty-two pounds. There were as before many adhesions, some of which were divided by scissors after tying with silk or whipcord. The largest adhesion resembled a pedicle; it was too intimately attached to the omentum and intestines to be separated, so it was transfixed and tied in two parts by stout whipcord, then cut and the stump left as in ovariotomy.

The patient had now been nearly two hours under operation, when exploring we found another mass as large as a fœtal head in the pelvis. It was too firmly attached to surrounding structures to admit of removal without manœuvres so tedious and doubtful as to preclude the prospect of recovery. So again the wound was closed. Vomiting and diarrhœa were troublesome for some days, but again she has made a good recovery from the operation. An incidental point of interest is that in extending the wound, owing to the close adhesion of small intestine to the abdominal wall, the intestine was injured, some fæces escaping by the opening. It was closed by continuous suture of silk.

(February, 1877.—The disease returned. In three months she was nearly as big as before the operation. She will probably sink at no distant date.)

ON THE DISPLACEMENT OF THE UTERUS BY THE DISTENSION OF THE BLADDER, AS SHOWN BY EXPERIMENTS ON THE DEAD BODY.

By J. Braxton Hicks, M.D., F.R.S., &c.,
OBSTETRIC PHYSICIAN AND LECTURER AT GUY'S HOSPITAL;
ASSISTED BY
J. F. Goodhart, M.D., M.R.C.P.,
DEMONSTRATOR OF MORBID ANATOMY AT GUY'S HOSPITAL.

So far as I am aware, the influence of the distension of the bladder on the position of the uterus has not before been made the subject of experiments. The matter is of some importance to gynæcologists, and this it is which has induced me to offer this contribution to our knowledge in this particular. Facts are safe—to rest upon suppositions unreliable—and yet even in this a good many arguments have been built without any accurate information.

The details here brought forward are but a slight contribution; I trust others may be induced to follow them out further. Being anxious to obtain a knowledge of what amount of influence the distended bladder has in the production of the displacements, particularly retroflexions, of the uterus, I asked my friend Dr. Goodhart to undertake some experiments in the necropsy room of Guy's Hospital. To this he kindly assented, and the following gives an account of his exertions.

The abdominal cavity was first opened, and the intes-

tines, in the majority of instances, were drawn out of the pelvis to bring into view the position of the uterus. This withdrawal of the intestines from the posterior aspect of the uterus must be kept in mind whilst reading the account of the experiments, because the occupation of the recto-uterine pouch of peritoneum by the intestines in a normal condition of the pelvic viscera has doubtless much to do with the ordinary position of the uterus.

A catheter was then introduced into the bladder, and water forced in. Sometimes the pressure was carried to the extreme point, even to rupturing the organ, and it is noticeable that when the bladder burst from over-distension the rupture took place at the fundus. However, it was also to be seen in the course of these experiments that the bladder distends most easily and under ordinary conditions in the direction backwards (*i.e.* towards the sacrum), and it is not until it has become nearly completely distended that its upper segment begins to be stretched.

In some instances the coils of intestines were not removed from the pelvis, but it was found that as the bladder became fully distended these coils were gradually pushed up, till they were forced completely above the brim. So that it appears that the removal of the small intestines from the pelvic cavity did not affect the results of these experiments.

The different relative positions of the uterus under which these investigations were undertaken gave necessarily varying results, but out of these variations it will not be impossible that one may learn more than from more uniform conditions.

In some of the experiments it was sought to find out what effect the backward movement of the uterine fundus by the vesical distension had upon the tension of the round ligaments. It will be seen by the following reports that in nearly all the instances the effect was trivial, often nothing. This is contrary to the state of the round ligaments in the pregnant condition, for there,

as the fundus rises up towards the ensiform cartilage, they become, if not absolutely stretched, yet by no means relaxed, and no doubt that at a certain period of labour, *i.e.* after the head has escaped the os, it prevents in part the recoil of the uterus, should the head meet with an obstacle to its descent.

These experiments, although by no means embracing all the variations of uterine position, still help us to see some of the effects of distension of the bladder on its position.

On opening the abdomen it was noticed that the position of the uterine fundus was towards the back in the majority of instances. This certainly is not the position of the uterus in the normal state. I think this might be explained partly by the comparative freedom of this part, which when the body lay on the back allowed gravitation to act. I also am inclined to think that the opening of the abdominal cavity did away with one of the factors which tend to keep the uterus in its normal position, namely, that called by Dr. Matthews Duncan "the retentive power of the abdomen." As soon as the air enters the cavity this influence ceases, and other forces come into play. Besides this the tension of the abdominal walls, caused by the gaseous distension of the bowels, unless carried to too great an extent, stretches the floor of the peritoneum, and this with the occupation of Douglas's pouch of peritoneum by intestines causes the uterus to remain in the normally slightly anteverted position. The section of the abdominal wall neutralises this. When gas is unusually deficient in the intestines, as in some very hollow incurved abdomina, the sustaining power is also lost, and thus Douglas's pouch being nearly empty the uterus is unsustained, and is free to fall back under the influence of the bladder and gravitation. That in such cases as these the position of the uterus is liable to great variation can be constantly observed clinically. Extreme flaccidity of the abdominal walls also will interfere with the sustentation of the uterus, though possibly not to such an extent.

But I do not think we can altogether look upon this question of the uterus as a simply mechanical affair; I am inclined to attribute to the ligaments of the uterus and to the vascular plexuses which surround it more power of alteration of position, by contractility and injection, than usually credited to them, and this particularly in the very irritable and sensitive.

Experiments on the Dead Body.

Experiment 1.—Young woman, died of mitral disease. Uterus small, lying deeply in the pelvis. Bladder empty. The reflected fold of peritoneum between bladder and uterus seemed to keep them firmly together, and to prevent any amount of displacement by the hand. The only condition which seemed to render the round ligament at all tense was the pushing the fundus uteri firmly backwards and downwards into the cavity of the pelvis. It was difficult to bring it by traction upwards; the round ligament was not rendered tense by it. The peritoneal folds and reflexions seemed most concerned in keeping the uterus in position. The bladder was distended fully by its upper segment, the uterus altogether disappearing from view. The round ligament was not rendered tense. The uterine ligaments were then all cut away and bladder again distended, but the uterus was pushed deep down into the cavity of the pelvis as before.

Expt. 2.—Case of cirrhosis. Pelvis large. Rectum full of scybalæ, so that the uterus was lying high up in the pelvis an inch below the brim, pushed up by the distended rectum. No ligaments tense. Bladder empty. The bladder was then distended to rupturing. The uterus rose with it and was pushed to the right side, so that the fundus reached above the brim to the right. The left round ligament was rended fully tense by this means so far as the portion curving round the bladder,

but the rest in contact with the uterus was still flaccid. The other round ligament continued loose.

Expt. 3.—Uterus deep down in cavity of pelvis, vertically placed, but displaced to left of median line by a strong rounded band from the broad ligament. The bladder was empty. About two pints of water were injected into it, and it then expanded upwards so as quickly to hide the uterus altogether; but examination by the hand showed that it had assumed a horizontal position, the fundus rotating backwards on the cervix, as on a pivot.

Expt. 4.—Uterus quite healthy, but it was placed horizontally, the fundus against the sacrum, the os looking forwards (retroverted). The bladder was injected, but not without some force being required; however, about a pint and a half was thrown in. It distended at first at the base a little, and pushed the fundus further downwards. The upper portion of the bladder then expanded, but no further alteration in the position of the uterus took place.

Expt. 5.—Case of abortion at the fourth month. Uterus large, tending to retroversion. The bladder was moderately distended. The uterus was thereby not more retroverted, but carried backwards so far as that the fundus touched the hollow of the sacrum. The round ligaments appeared slightly tighter during than before the injection.

Expt. 6.—Pelvic organs healthy. Uterus axis corresponding to that of the outlet (partially retroverted). The bladder was injected to a moderate extent, so that it appeared a little above the pubes. The fundus uteri was distinctly pushed downwards into the horizontal position, and the whole organ carried backwards, so that the fundus touched the promontory of the sacrum. The round ligaments did not become notably tense during the process.

Expt. 7.—On a woman, æt. 34. Uterus large, lying a little to left of median line. The bladder was moderately

distended, so as to fill the pelvis and rise above the brim. The uterus was thereby retroverted to the horizontal position, then carried backwards a little, the fundus nearly touching the sacrum. The round ligaments did not become tense.

Expt. 8.—Æt. 18. Uterus lying partially retroverted. The bladder, distended to bursting, completely obscured it, pushing it deep down into the pelvis quite horizontally. No tension of round ligament.

Expt. 9.—Uterus a little large, lying back in pelvis. The bladder, slowly distended to bursting, pushed the uterus into the horizontal position completely out of sight. An attempt was made to put the round ligament on the stretch; this could only be accomplished by pushing the uterus downwards in the axis of the vagina towards a prolapse. No amount of backward or upward displacement was allowed by the broad ligaments and cervical attachments sufficient to stretch the round ligament. A corrective in the case to further retroversion was noted in the distension of the base of bladder, which tended to produce a cystocele, thus pushing the whole uterus backwards in the horizontal position. The pelvis was occupied by the distended bladder as totally to obstruct the view of the uterus, the position of which could only be made out by the hand. The bursting of the bladder occurred, not as usual by a direct slit, but through the outstretched mucous and muscular coats into the subperitoneal cellular tissue.

Expt. 10.—Middle age. The uterus had one adhesion on the left side to the displaced omentum. The bladder was distended to bursting, which took place in the manner narrated in last experiment. The uterine position was not altered in this experiment.

Expt. 11.—Pelvis filled by a large cancerous tumour of the left ovary. Uterus not fixed, but lay in front of this. Bladder away out of sight under pubes. The bladder when distended slipped upwards between the tumour and brim of pelvis like a flattened flask, a little to the right; it

did not alter position of uterus or tumour at all, itself suffered all the displacement.

Expt. 12.—Æt. 30. Death from distended Fallopian tubes, with suppuration and suppurative peritonitis. The broad ligaments were not thickened, and the uterus was free, but retroflected. The round ligament could only be rendered tense by pushing the uterine fundus still further downwards. In this latter position the uterus remained whilst the bladder was distended. At first no change in the uterine position occurred, but after half a pint had been injected there was a sudden partial restitution, and at the same time the uterus became raised in the pelvis, so that the fundus came in contact with the promontory of the sacrum, the bladder occupying all the pelvis and rising three inches above the brim. The broad ligaments were made rather tense round the sides of the bladder, but the round ligaments remained flaccid. Examination per vaginam showed that that passage was considerably encroached upon by the bulging of the base of the bladder, the os uteri being out of reach, although the organ was, as before said, somewhat retroflexed, but it was evident that complete retroversion was prevented by this condition. The uterus at its vesical attachment was thus poised, as it were, between two opposing forces, the distended anterior part of the base of the bladder in front pushing the os and cervix backwards and so tending to antevert the uterus, the distended posterior part of the base of the bladder pressing on the fundus uteri and thus disposing, as has been described in so many of these experiments, towards retroversion. The fundus of the uterus and bladder were more closely united than usual in this case.

Expt. 13.—Æt. 33. Uterus healthy. Bladder was distended to extreme point. Uterus was thereby pushed down completely out of sight, the bladder filling the pelvis, and the base also filling the vagina, the os uteri being low down. The uterine ligaments did not become tense. The water was allowed gently to escape, and then

when the uterus again came into sight it was seen pushed well to the left side of sacrum deep down in the cavity.

Expt. 14.—Æt. 22. Death a week after premature delivery at the eighth month, of phlebitis of ovarian vein. Uterus very large, occupying a good part of the axis of pelvis, fundus being just below the brim, about four inches in diameter. Bladder having been distended nearly to bursting, the uterus rose upwards as it distended till its fundus was squeezed out of the pelvis altogether, and lay on the last lumbar vertebra, its cervical portion being jammed between the bladder and promontory of sacrum. The round and broad ligaments remained loose all the while.

Expt. 15.—Æt. 38. In this case the intestines were not displaced from the pelvis. The uterus was adherent posteriorly to the Fallopian tubes, which were the subjects of "dropsy," distended like coils of small intestines. The bladder was distended to rupturing (this occurred at the fundus). The intestines were pushed up out of the pelvis by the distended bladder; but the uterus was pushed backwards so that it lay beneath the bladder, its posterior wall in contact with the rectum opposite the coccyx.

Expt. 16.—Æt. 29. Uterus large, and considerably anteflexed. The intestines were not drawn out of pelvis. The bladder being distended, the intestines were forced up out of the pelvis, whilst the anteflexion of the uterus was temporarily remedied, so that the fundus was pushed against the distended rectum. The lower segment of the bladder was pushed during the distension voluminously into the vagina, so as to render it impossible to reach the os, which had been very high up before. The anteflexion returned as soon as the bladder became empty.

Expt. 17.—The position of the uterus was not altered, except being rendered more horizontal than before.

Expt. 18.—Æt. 23. Miscarried some months ago. On opening abdomen some coils of intestine were behind

the uterus in the pelvic cavity. The uterus was large, weighing three and three quarter ounces, and fundus retroflexed so as to be distinctly felt per vaginam. As the bladder was distended the coils of intestine were gradually displaced out of the pelvis altogether. The bladder at last occupied the whole antero-posterior diameter of the pelvis, completely hiding the uterus from sight. But by examination per vaginam it was evident that the uterus was raised by the distension of the bladder, being carried upwards and backwards towards the sacrum, and also becoming more fixed; when the bladder emptied itself the uterus descended and became movable. In this case the lower segment of the bladder distended freely so as to hide the os, after the manner of a cystocele, and this bulging tended to push the os and cervix backwards, and did for a time correct the retroflexion, which former experiments showed was rather increased.

From a review of this series of experiments the following conclusions seem to be indicated:

1. That the bladder distends first towards the sacrum, and then upwards.

2. That the distension of the bladder, as a rule, stretches the uterus along the under surface, rendering it horizontal in position instead of vertical, or parallel to its floor. Thus, the influence of a distended bladder is almost always towards retroversion.

3. That if the vaginal portion be in a more relaxed condition than natural, then this part is distended into the vagina below and in front of the os uteri; after this the upper part is enlarged. By this movement the cervix is carried backwards first, but afterwards, from full distension, the total effect of the action is to carry the uterus wholly backwards in a more or less vertical position.

4. If, however, the uterus be enlarged, and especially if already situated high in the pelvis, then it is pushed

upwards after it has been driven against the sacrum, and is ultimately carried out of the pelvis.* The distension of the rectum assists this upward tendency of the uterus.

5. If the cervical attachments be firm, then there is a tendency for the distension of the bladder to produce retroflexion. If it be already retroflected or retroverted, then this malposition is increased.

6. If with the uterus already retroverted the vaginal portion of the bladder distended first, then the first effect is to correct the retroversion more or less, after which the uterus is displaced backwards in the horizontal or vertical position.

Additional Remarks.

Since writing the foregoing report we have been made acquainted by the courtesy of Dr. John Williams with the results of work which he has done in the same direction. They were published in the 'Lancet' for 1873, vol. ii, pp. 192, 298.

His conclusions very much coincide with our own; for instance, in that distension of the bladder produces retroversion without flexion, and that a combined distension both of bladder and rectum raises the uterus bodily in the pelvis in an axis more or less perpendicular to the plane of the brim. Dr. Williams does indeed say that in the latter case the uterus becomes somewhat curved forwards (? anteverted). In the cases we have seen it has been

* Dr. Tyler Smith, in the 'Principles and Practice of Obstetrics,' p. 105, has these remarks, showing he was aware of this influence:—"The real state of the case appears to be that the uterus rises slowly out of the pelvis, partly because of its increase in bulk is from above, the fundus being the first part developed and the cervix the last; partly because it is in reality a wedge with the apex below; partly because the bladder pushes the uterus upwards every time it is distended directly by means of the fluid contained in it, and indirectly by elevating the vesical layers of the pelvic fascia, to which circumstances may be added the obliquity of the pelvis and the frequent change of position on the part of the mother."

rather inclined backwards still, but we imagine that the conditions of Dr. Williams's experiments and our own were somewhat different; in the one the rectum was distended artificially, in the other it was a fæcal distension. Now, in the former the walls of the bowel would be much more equally filled out and unyielding than is ever the case in a normal condition, a rectum distended by fæcal matter moulding itself somewhat to surrounding parts. It is quite possible that, as the author says, in simple distension of the rectum, the bladder remaining contracted, the uterus may fall forwards. But we are inclined to the belief that such is not the case from the distension arising from fæcal accumulations; this it seems to us, producing a movement upwards, leads to a slow stretching of the sacro-uterine and possibly of the other ligaments of the uterus, and in so doing *predisposes* to various malpositions of the uterus, chiefly retroversion and prolapsus, when other immediately acting factors are present.

That the uterus describes the axis of two circles, the common centre of which may be taken as somewhere about the junction of the cervix with the body, is precisely our own conclusion drawn from distensions of the bladder alone. Dr. Williams strengthens that position by showing that distension of the rectum turns the circles the other way. The question of anteflexion now is merely a question of the extent of the one performed which we put to an angle of about thirty-six inches backwards with the axis of inlet.

The two series of observations quite agree in showing that the study of the alterations of position which the uterus undergoes, according as its neighbouring viscera are distended or contracted, tends to elucidate the pathology of retroversion and retroflexion rather than of anteversion or anteflexion. With regard to the two former we may remind the Society that we regard the uterus as poised on its centre, at the junction of the body and cervix, that a very moderate distension of the bladder

suffices to tilt the fundus to a horizontal position, and that further distension, though generally completing the retroversion, may act in distending the anterior wall of the vagina and so prevent it, but while preventing the version it encourages flexion. And, further, we think that the horizontal position of the uterus is readily assumed. Some over-heaviness of the body of the uterus is a sufficient explanation of many flexions.

Dr. Williams hardly seems to us to put sufficient stress upon this origin of flexions.

In conclusion we may say how glad we are to find that two independent series of observations agree so closely in their results. It cannot be but that their value is much enhanced thereby.

Mr. SPENCER WELLS doubted whether experiments made on the dead body in the recumbent position after removal of the small intestines could afford reliable information as to the effect of varying degrees of distension of bladder and rectum upon the uterus of living women in the erect and other positions of the body. The influence of the small intestines (whether empty or distended by fæces or gas) upon the uterus was at least as great as that of either bladder or rectum, or both; and when they fell at all low down behind the uterus into Douglas's pouch (as they certainly do not infrequently), they not only affect the positions of the uterus, but often lead to mistakes in practice.

Dr. CLEVELAND remarked that, in estimating the full effect of a distended bladder upon the uterus, it should be remembered there is a considerable difference in degree between the distension and, it may be added, thickness of walls of a healthy bladder injected after death, and that of an organ gradually enlarging to an enormous size, under retention, during life. In Dr. Hicks's interesting experiments the maximum of distension produced by injecting two pints of water did not probably reach one fourth of what sometimes occurs under retention.

The PRESIDENT reminded the Society how William Hunter had taught that retroversion of the gravid uterus was produced by an over-distended bladder, and this doctrine had been almost exclusively accepted for a time. In an early volume of the 'Obstetrical Transactions' Dr. Tyler Smith had published a paper in which, after alluding to Mr. Hunter's theory, he pointed out that in some instances, at least, the retroversion was not due to the pressure of the bladder, but that pregnancy supervened in

a uterus which had been known to be retroverted before gestation commenced. William Hunter's observations applied especially to the uterus when its fundus was enlarged by pregnancy, but the investigations of Dr. Hicks carried this subject further, and seemed to indicate that the unimpregnated uterus might be displaced by a distended bladder.

Dr. JOHN WILLIAMS stated that his experiments were performed both on the living and on the dead subject. When the bladder and rectum were both full, the uterus was high up in the centre of the pelvis. If the bladder were empty, the uterus became immediately anteverted. When the bladder and rectum were both empty, the uterus was low and retroverted. As to the objections raised to the experiments, it was said that the intestines were generally found in Douglas's pouch during life: they were not found there once in twenty cases. When the uterus was attached to the posterior wall of the bladder for a longer distance than usual, it became anteverted when the bladder was empty. Unless the bladder and rectum were very much distended, the uterus never reached the brim of the pelvis. Constipation was an undoubted cause of retroflexion, as on defecation the bladder was first emptied, and then the straining produced retroflexion.

Dr. ROUTH was surprised to hear it said that Douglas's space always contained the intestines in the normal condition. He, on the contrary, believed it to be very exceptionally the case. He had seen Douglas's space himself opened during operations by some eminent surgeons, but the intestines were not felt in them on these occasions. He could not help feeling that the effect produced by a full bladder with the impending weight of intestines above and the abdominal walls uninjured, must be very different from that when both these were removed. In ordinary anteflexion a plan of practice was advised to be carried out where the wife was sterile, and with result of offspring, by keeping the bladder full during connection. The effect in these instances was to raise the uterus and replace it in its proper axis. A full bladder had also the tendency to lengthen the uterus, as evidenced in some cases of post-partum hæmorrhage, where a full contraction of the uterus could not be obtained till the bladder was emptied.

Dr. SNOW BECK remarked that some years ago experiments of a similar character to those related had been instituted at University College with the object of determining whether a silver catheter could be allowed to remain in the bladder, so as to keep this viscus continually empty without any danger of the point of the instrument pressing against, injuring, and possibly protruding through the posterior wall; and it was found that as the bladder became empty the cavity was flattened from before backwards, apparently in consequence of the pressure of the intes-

tines in the pelvis pressing against the posterior surface. The upper portion of the bladder being maintained in contact with the walls of the abdomen by the reflection of the peritoneum and the adjoining cellular tissue, it was impossible for the distended bladder to be tilted or turned back at the upper portion, as represented in the drawings placed before the Society. Such being the result in the male subject, it was highly improbable that the condition of the organs in the female pelvis differed so essentially from what had been observed in the male as to lead to results so opposite as the two series of observations appeared to show. All his experience, whether in the examination of the relative position in the viscera in the post-mortem room or in the clinical examination on the living subject, were directly opposed to the conclusions which Dr. Braxton Hicks had stated. This difference, however, appeared to admit of an easy explanation. In the observations on the male subject the condition of the organs had been retained as nearly as possible the same as it existed in the living subject; in Dr. Hicks's experiments the relative condition of the organs had been altered as much as it was possible to alter them without considerable mutilation of the body. If he rightly understood the descriptions on the paper, the body had been laid on the back, the abdomen opened, and the intestines withdrawn from the pelvis, which manipulation had produced an entirely artificial condition, and one which never could exist in the living subject. Every one knew that the uterus lay against the posterior part of the bladder, to which it was united at the lower part by strong and short cellular tissue; that the position of the uterus was influenced, to a certain extent, by the conditions of repletion or emptiness of the bladder, and that the uterus was influenced, though to a smaller extent, by the distension or the flaccidity of the rectum. But all these slight alterations in position of the viscera in the pelvis were within the natural and physiological relations of the different organs. On the other hand, these slight changes in position were governed and controlled by the pressure caused by the small intestines, which not only filled the whole of the pelvis, but were also maintained in their position by the weight of the viscera in the abdomen, aided by the pressure from the abdominal walls. The small intestines, then, maintained in their position in the pelvis, rested upon and pressed against the posterior part of the uterus, but not extending into the portion known as Douglas's pouch, and in the living subject not only prevented any material alteration in the position of the uterus from distension of the bladder but also caused it to return to any position from which it might have been slightly raised as soon as the repletion of the bladder was removed. To place the dead subject on the back, to open the abdomen, to take the intestines out of the pelvis, and thus remove the natural pressure and support which the uterus received

during life, was a complete alteration of the facts as they naturally existed, and any deductions drawn from such an altered condition of things could only lead to a perversion of what actually occurred. The condition of the viscera in the pelvis, as well as of those on the abdomen, might not inaptly be compared to the contents of a well-packed portmanteau, where one article supported the other without any undue pressure, and where each was maintained in the situation in which it had been placed, whether the portmanteau was placed upon either end or either side. Of course, the relative position of the different organs would be much changed towards or at the end of pregnancy, when the abdomen became distended by the development of an ovarian cyst, of a fibrous tumour formed in the cellular tissue behind the uterus, &c. But these and similar great changes produced in the relative position of the abdominal organs did not form part of the experiments referred to, nor did they come under consideration at the present time.

Dr. BANTOCK stated that his experience, gained in the operation of ovariotomy, was directly contrary to that of Dr. Williams, as to the intestines being behind the uterus.

Mr. SPENCER WELLS believed the intestines were always behind the uterus.

Dr. J. WILLIAMS remarked that, in most cases of ovarian tumour, the uterus was either pressed down or else drawn up; in the latter case, of course, the intestines would go down behind.

Dr. WYNN WILLIAMS remarked that it was quite impossible to draw any comparison between the situation of the viscera in healthy women and those suffering from ovarian tumours. The whole of the internal organs were displaced by the great size of these tumours, some being pushed upwards, some downwards and backwards, and, as a natural sequence, the intestines were often forced down behind the uterus. He would ask where else could they go?

Mr. LAWSON TAIT said that he had never found any evidence that the intestines were down behind the uterus in a case of ovarian tumour before the tumour was removed; and his experience, if it did not bear out that of Dr. Williams as to the rarity of the actual presence of intestines behind the uterus at any time went to show that the evidence of their presence was exceptional, for he had obtained it only twice, and in both instances demonstrated the fact to others on account of its rarity. He did not think that any conclusions which Dr. Hicks might draw from experiments on a dead body lying on its back would naturally aid us in judging of the influence of distension of the bladder in the living subject.

Dr. ROPER observed that the object of Dr. Hicks's experiments seemed to be to show that the uterus became mechanically

retroverted and retroflexed by over-distension of the bladder. Such distension obviously produced retroversion; but it was not so easy to understand how it could produce retroflexion of a healthy uterus. Retroflexion was mostly connected with a morbid condition of the structure of the uterus resulting from metritis, or the uterus became bent by the contractions and adhesions brought about by parametritis.

Dr. GALABIN said that, having been present at two or three of the experiments described in the paper, he could add his testimony as to the mode of expansion of the bladder, namely, that it expanded in a globular form, and that its lower segment swelled out first. It appeared to him self-evident that, when the uterus was anteverted during life, the intestines were in contact with its posterior surface, and aided in maintaining its position, for that surface then looked towards the abdominal cavity. This was not disproved by the opposite condition found after death, when the uterus became retroverted.

Dr. TILT thought the experiments valuable, but that as in the women we have to treat the womb and the bladder are supported by the intestines and the abdominal walls, we should better understand the effects of vesical distension on the womb, by injecting the bladder without opening the abdomen, and by then making a section of the body after freezing it.

Dr. HICKS stated that he had brought forward his communication as a small contribution on the subject. In the horizontal position of the body the uterus was still vertical. The intestines did unquestionably get behind the uterus. It was impossible to distend the bladder to the umbilicus without bursting it.

CASE OF VESICO-VAGINAL FISTULA LEFT FOURTEEN YEARS AFTER LITHOTOMY, CURED BY A SERIES OF PLASTIC OPERATIONS.

By LAWSON TAIT, F.R.C.S.,
SURGEON TO THE BIRMINGHAM HOSPITAL FOR WOMEN.

A. C—, æt. 37, states that she underwent the operation of vaginal lithotomy in March, 1862. After that she went through a series of operative proceedings at the hands of different surgeons.

In July, 1874, she was placed under my care by Dr. Hunt, and I found the state of her vagina as follows:— The labia were greatly swollen, excoriated, and encrusted with phosphatic deposit, so that she could not be examined except under an anæsthetic. No part of the urinary tract from the orifice of the ureters to within an eighth of an inch of the meatus urinarius urethræ was intact, for a knife seemed to have been carried so as to lay open that vast extent, and a good deal of tissue had been destroyed by sloughing, atrophy, or by attempts at reparative operation; so that a small pouch at the upper part of the vagina, not much larger than a walnut, represented the bladder. At each margin of this pouch a ureter was to be seen constantly emitting a stream, and from its anterior angle the split urethra ran forwards to a minute bridge of mucous membrane which was all that was left uncut. It is difficult to see what inducement there was to lay the urethra open to this extent, and if there was any such inducement, it is still more difficult to see why the whole canal was not laid open.

On July 24th, 1874, with the assistance of my colleagues at the Women's Hospital, I pared the edges of the bladder proper, and had the satisfaction of finding them unite completely in a few days, so that what remained open was the neck of the bladder and the urethra. Of course, even the complete success of this operation did not benefit the condition of the patient at all; it was merely the basis for much more difficult work, which I afterwards found to be still more impeded by the fact that the patient suffered from a phosphatic diathesis of the most inveterate description.

On August 10th I made my first attempt to close the urethra and neck of the bladder by making two deep linear incisions parallel to and about an eighth of an inch outside the margins of the strip of urethral mucous membrane. These I dissected up towards the middle line till my incisions, most carefully made I need scarcely say, were within a quarter of an inch of each other. I then

pared the vaginal edges and stitched them carefully together at intervals of about three eighths of an inch throughout. I put in no catheter, and merely directed that the vagina should be very carefully washed out twice a day with a weak lotion of permanganate of potash.

All looked well for three days, during which time she passed water voluntarily at short intervals. But during the fourth night the urine began to dribble as usual, and when I examined her next morning the whole wound appeared to be in a condition of slough. This I afterwards found to be only a coating of phosphates, for it came away, leaving a healthy surface behind it. But it was mischievous enough to undo the whole of my work on the urethra, but without any loss of tissue, for the flaps simply went back to their original places, and were soon firmly united there.

I may say that as she had passed nine years of her life on a bed-pan her nates were in an awful condition, and she could not bear to be touched unless she was anæsthetised. She has been under the influence of chloroform and ether, during the eighteen months in which she has been under my care, as nearly as we can reckon twenty-three times. I put her on nitro-muriatic acid for two months, with the effect of greatly reducing the amount of phosphatic deposit.

In the beginning of October, 1874, I had the advantage of the advice of my friend Mr. W. D. Napier, whose great ingenuity in devising instruments for the bladder is so well known. With his assistance I repeated my former attempt to close the urethra, and this time I stitched in one of Mr. Napier's catheters. But in thirty-six hours it was blocked up by phosphatic incrustation, and it had to be changed every twelve hours to keep it clear.

The condition of the wound was satisfactory till the morning of the fifth day, when the same phosphatic incrustation destroyed its union and the whole reopened.

On January 22nd, 1875, I performed for the third time

the same operation, this time leaving in a metallic catheter, but with no better results.

On February 4th I again tried to close the urethra and neck of bladder without any catheter, but I again failed.

For the next nine months I directed my attention entirely to the mitigation of the tendency to the deposition of phosphates, by a prolonged course of mineral acids, and to the cure of the induration and excoriation of the labia by occasionally brushing them over with strong carbolic acid. In these measures I was successful to a considerable extent, and early in November of last year I made another attempt to close the gap in the neck of the bladder and urethra. My former experiences were more than enough to convince me that to be successful I must provide an exit from the bladder other than the urethra, until the wound had fairly united. For this purpose two courses were open to me. I might make an opening into the bladder from above the pubis, or I might make it to one side of the urethra which I wanted to close. The former proceeding recommended itself as the one most likely to succeed, but it certainly was the more hazardous. The latter was less risky, but it had the disadvantage that the space on either side in which it could be done was very small, for I dared not venture to interfere with the line of cicatrix, and I did not wish to run the risk of inflammatory action spreading to the united edges. My action was decided by the consideration that if the vaginal method failed I had still the chance of making an opening above the pubis. I therefore passed Boudault's trocar through the left vaginal wall, keeping as far from the urethra as I could, into the bladder and out on the other side close to the cervix. Through it I passed a nickelled wire drainage tube and fastened it by a piece of the wire straightened, on which a split shot was closed at the wound of exit from the bladder. I then lifted the same flaps as I had done four times before, and closed the neck of the bladder and urethra by six stitches.

The result was perfect, and after sixteen days I

removed the stitches and the drainage tube. As the wound for the latter was valvular it closed without trouble, and the patient is now able to retain about four ounces of urine, requiring to pass it at intervals of about two hours. She has had no further need of the bed-pan, and her labia have resumed a completely normal appearance. My hope is that the bladder will increase in capacity in course of time, but even as she is the patient expresses herself as very well satisfied with the improvement in her condition.

P.S. March 24th.—This patient's condition now is so far improved that she has been enabled for some weeks past to retain as much as ten ounces of urine. She rarely requires to rise more than once during the night, and never wets the bed. The urine never passes involuntarily unless she is under nervous excitement. She always feels an inclination to pass water a few minutes before she does it, just as she used to do many years ago. She passes water during the day at intervals of from two to four hours, and in quantities varying from four to ten ounces.

The PRESIDENT thought this an instance of the most unmitigated perseverance under the most difficult circumstances.

Mr. SPENCER WELLS had seen the patient operated on by Mr. Tait, and confirmed all that had been said in the paper as to the benefit which had followed the operation. He had been surprised that in a case where the urine was so loaded with phosphates the tube had remained so free from phosphatic deposit. In two cases of young women under his care, one in the Samaritan Hospital, and one in the practice of Mr. Garlike, a similar proceeding was discussed in consultation, but such great benefit was derived from the application of the actual cautery to the orifice of the urethra and for about an inch along the canal, leading to cicatricial contraction after the separation of the trocar, that no further operation was necessary. So much good was done in both cases that he (Mr. Wells) would be disposed to try the effect of cauterisation of the urethra in any case of incontinence of urine in women when there was no vaginal fistula.

Dr. BANTOCK stated that Mr. Tait's experience confirmed his own, and that Emmet had long ago pointed out that, in the case of fistula involving the urethra, it was absolutely necessary to

success to make an outlet for the urine through the floor of the bladder. Some time ago he had a case under treatment in the Samaritan Hospital where he attempted to close a lacerated urethra (done in removing a stone per urethram), without making the outlet. The case appeared to progress well until about the fourth day, when it became evident that the operation had failed. The tissues about the urethra were bad to heal, and he had seen operations in this part repeatedly fail in other hands. The necessity of changing the catheter and the danger of disturbing the parts in doing so explained the want of success, while it was also impossible to prevent the contact of urine to some extent. The tissues were here very spongy, and bled very freely—two conditions very unfavorable to the healing process.

Dr. ROUTH remarked that Mr. Baker Brown had adopted the plan of making an artificial urethra, sewing up the normal one in similar cases.

Mr. LAWSON TAIT inquired if Mr. Wells would employ the actual cautery in cases of large dilatation of the urethra, such as proposed by Mr. Teale of Leeds.

Mr. WELLS replied that he had not seen incontinence after dilatation.

CASE OF HEMATOCEPHALUS.

By Dr. G. DE GORREQUER GRIFFITH,

SENIOR PHYSICIAN TO THE HOSPITAL FOR WOMEN AND CHILDREN AND PHYSICIAN-ACCOUCHEUR TO ST. SAVIOUR'S MATERNITY.

ON Sunday, April 2nd, of this year, I was called by Mr. Bamber to see a patient who had had labour pains "off and on" for exactly a week, and whom he considered was pregnant with a hydrocephalic child.

I examined, and found the top of the scalp protruding between the labia vaginæ, and distended with each little pain; there was no strong uterine action. Carrying the finger higher up I could easily feel the widely dilated head, with sutures all separated, and bones far apart. I unhesitatingly agreed that it was a hydrocephalic fœtus, and the more so because the mother was dropsical all over her body.

Having swathed the abdomen with a binder in the ordinary obstetrical manner, and having another passed

over it and under the abdomen, with the ends towards the patient's back, so that they might be pulled upon by Mr. Bamber, and thus traction exercised on the very pendulous and dropsical abdomen and uterus, and so the greatest amount of support possible be given to the fœtus and to the expulsive pains, I punctured the scalp with the points of the perforating scissors, taking the precaution as I did so of standing beside or behind the patient lest the gush of water, which I expected, would splash over me. From the opening in the scalp there issued not water, but brain substance and clotted grumous blood quite fœtid, and this was followed by liquid and brighter coloured blood, also mixed with brain matter, to hasten the expulsion of which I made a second puncture in the scalp and enlarged the opening by tearing it with my fingers, brain matter issuing freely, and on introducing my finger into the abdomen, I found the brain a pulpy, broken-up mass. I next extracted the child with the hook.

The only remarkable appearance of the child beside the enlargement of the head was the extensive narrowing of the chest and abdomen, for which there was nothing in the woman to account, as she was largely made and roomy in every way. The fæces of the fœtus had been very freely forced out, and some had actually flowed away between the mother's labia before the birth, probably because of the narrowed condition of the fœtal abdomen, and it occurred to me this narrowing, in conjunction with a like condition of the thorax, had occasioned the state of the parts in the head. The child had peeling of the skin, showing incipient putrescence, and the umbilical cord was apparently rotten; hence, having separated the child and not daring to pull the cord, I at once introduced the hand, and with no little difficulty peeled off the adherent placenta.

In all directions I found the vagina and pelvis large and with plenty of room; the os uteri widely open, the uterus very much elongated and pendulous, so that almost my entire arm was buried out of sight.

I noticed the uterine walls were very thick and seemed puffy and dropsical, the posterior especially so; there was no sensation of blood flowing into the uterus from the so-called sinuses, but as the womb did not contract, I kept the hand in for some moments. No bleeding whatever occurred. When at length the womb did lazily contract I observed the inner walls were to the feel puffy and œdematous, and, as the contraction progressed, became corrugated and ridged, which, indeed, may account for there being no hæmorrhage; though the uterus lay dilated, being comparatively only slightly contracted. The placenta, which unfortunately has been destroyed, seemed quite healthy with the exception of being congested; the navel string was breakable from decomposition, but the blood-vessels, passing into the placenta, were full and distended.

Though the abdomen was very much enlarged from the dropsy, and the uterus remained but very partially contracted, there has been very little, even "show," and the patient is doing remarkably well.

It is her first child; her age twenty-nine years; she was married ten months; the dropsy set in last Christmas, but though Mr. Bamber had carefully watched the urine, no albumen was detected during the week preceding her delivery. The examination for albuminuria was conducted all the more carefully because the patient stated she had been told that she had Bright's disease. Since the birth of the child a trace of albumen has been found, but owing to probable admixture of the water with vaginal and uterine excretions this may be fallacious. I can find no history of syphilis.

The measurements of the head of the fœtus when partly distended with water were at the circumference, from ear to ear, nineteen inches, and twenty-one inches from the apex, where I made the puncture round the head, under the chin, and up the sides of the face to the same starting-point. If the head could have been fully dilated with water, the measurements would have been far greater.

On opening the skull after the child's removal we found all the sutures separated, the meninges intact, except where I had made an opening into them, and completely peeled off from the bones, resembling, indeed, a bag or cyst-wall with mashed-up brain for its contents. The ribs, owing to the narrowing of which I have spoken, were apparently bent on themselves, and then over the sternum; the heart was empty and small; the lungs lay tucked in on each side of the spine and were dark coloured; the liver, which I have preserved, was also congested, and on its convex surface was dappled with white glistening specks about the size of a fourpenny piece. The intestines were quite empty. Owing to the rapid decomposition I was unable to preserve the body of the child. The above case I have been obliged to term one of hematocephalus because the condition of the head was such that no other name seemed applicable.

OCTOBER 4TH, 1876.

ALFRED MEADOWS, M.D., F.R.C.P., President, in the Chair.

Present—49 Fellows and 9 visitors.

Books were presented by Dr. Joseph Amaun, Dr. George Bland, W. Lennox Browne, Dr. P. Budin, Dr. Julius Elischer, Dr. Thomas A. Emmet, Dr. Wm. Goodell, Dr. Guéniot, Dr. C. von Hecker, Professor F. Macari, Dr. W. L. Richardson, Dr. Bernhard S. Schultze, Dr. Ashburton Thompson, Dr. A. Wasseige, and Dr. F. Winckel, and a set of the Canada Medical Journal and Canada Medical and Surgical Journal was presented by the Editor, Dr. George E. Fenwick.

The following gentlemen were admitted Fellows of the Society: Charles F. Groom, M.D., Horace Manders, M.R.C.S., Richard Henry Milson, M.R.C.S., Edward James Nix, L.R.C.P. Ed., and Alfred T. T. Wise, M.D.; and the following gentlemen were declared admitted: Julius Elischer, M.D. (Buda Pesth), Henry Habgood, M.R.C.S. (Eastbourne), John Hadden, M.D. (Horncastle), J. Sinclair Holden, M.D. (Sudbury), Jos. Reinmund Beck, M.D. (Fort Wayne, Indiana), J. A. Irwin, M.B. (Manchester), Francis Ogston, Jun., M.D. (Aberdeen), Francis S. Scovil, M.R.C.S. (St. John, New Brunswick), and Samuel Sloan, M.D. (Glasgow).

The following gentlemen were elected Fellows: Morgan H. L. Allen, L.S.A., Richard Farncombe, M.R.C.S. (Bir-

mingham), John Garner, M.R.C.S. (Birmingham), Fred. E. Manby, F.R.C.S. (Wolverhampton), Thomas Millman, M.D. (Ontario), James Newham, M.R.C.S., Joseph Quirke, L.R.C.P. Ed. (Birmingham), Edm. G. C. Snell, L.S.A., and Herbert B. Spurgin, M.R.C.S. (Northampton).

The following gentlemen were proposed for election :— Mr. G. L. Clay (Birmingham), Dr. E. R. G. Groth, Mr. Wm. Hoar (Maidstone), Mr. Neville Holland, Dr. Allen Piggot (Beckenham), and Mr. Henry Thornton Wharton.

The following gentlemen were recommended by the Council for election as Corresponding Fellows : — Paul Budin, M.D. (Paris), James R. Chadwick, M.D. (Boston, Mass.), James R. Lusk, M.D. (New York), and Oscar Prevôt, M.D. (Moscow).

Dr. WILTSHIRE showed a specimen of utero-vaginal rupture which he had been asked to see after death. It was removed from the body of a fine, well-grown young woman to whom the accident occurred while in labour with her third child. The presentation was not observed to be abnormal, and the head being very low down, it was decided to leave her to the natural efforts, no reason for interference being then apparent. The greater part of a day passed with but very slight progress of the head. It was not thought necessary to apply forceps, but some ergot was given. After a while the head suddenly receded, the patient fell into a state of collapse and died.

At the post-mortem examination the body of the fœtus, together with the placenta and some clots, was found free in the abdominal cavity. A rupture was found at the junction of the cervix uteri with the vagina posteriorly and a little to the right. Somewhat to the left, and posteriorly also, a fibroid tumour was found. It was about the size of a large orange. The walls of the uterus were remarkably thick, fully 1½ inch and healthy.

Dr. PLAYFAIR said that he thought this interesting specimen should not be allowed to pass without some comment, since it seemed to him to be calculated to teach many valuable lessons. He would inquire why the forceps had not been applied? Here was a uterus, exhausted by many hours' fruitless labour, acting at a disadvantage from the presence of a large fibroid in its walls, which had been spurred into action by ergot, and rupture had ensued. It is a remarkable fact that a large proportion of cases of rupture had followed the use of that drug. Who could doubt that an early application of the forceps in this case, in which the head is stated to have lain in the perinæum for nearly the whole day, would not have been a truly conservative proceeding, and might have averted the catastrophe? Another inquiry this case suggested was, why gastrotomy was not resorted to when the child had entirely escaped into the abdominal cavity? Many successful cases of this kind are now on record, and with our modern experience of ovariotomy there should be no hesitation in adopting it, as giving at least a chance to a patient otherwise doomed to certain death. He did not wish, in making these remarks, to say anything that might be considered disparaging to the gentleman who had conducted this case; on the contrary, it was only fair to point out that the practice was such as would be fully justified by the rules laid down in many obstetric text-books. At the same time it must be admitted that the lessons which such an important case were calculated to teach should not be overlooked, and for this reason he ventured to bring them under the notice of the Society.

Dr. J. BRAXTON HICKS inquired as the size of the os uteri, and where it was at the time of the rupture. If the cervix were firm over the head, how was it that the child escaped into the peritoneum?

Dr. AVELING inquired how soon after death the post-mortem examination had been made. Sometimes displacement occurred from the effects of decomposition post mortem.

Dr. MEADOWS suggested that possibly the tumour had been mistaken for the head, the former being so large as to interfere with the descent of the head.

Dr. ROPER asked as to the relation of the tumour to the rupture.

Dr. WILTSHIRE said that there were some objections to the use of forceps which influenced his friend in whose practice the case occurred, and caused them to withhold the instruments. It was easy to be wise after the event, and it might be said that the accident would possibly have been averted if forceps had been used. The ergot might have added somewhat to the risk of rupture, which no doubt was irritated by the rubbing or fretting of the tissues against the sacral promontory at the junction of the uterus with the vagina; this being induced probably by the

tumour impeding the full descent of the head. He would add nothing more, as the case was a painful one. It afforded a lesson, however, which, he thought, ought not to be lost.

Dr. DALY, of Dalston, related the history of a case of intra-uterine tumour which he had removed, the patient dying two hours after its removal.

He was called by a neighbouring surgeon to see the patient, six weeks after her confinement. She was in bad health, and had been seventeen years without being pregnant. At first she went on well after the present confinement, but then violent and continual pain set in, which was rapidly wearing the patient out. By digital examination the "os" was found dilated to nearly the size of a crown, and projecting through it, slightly, was a solid tumour.

Chloroform having been administered, a rather large tumour, having a tolerably broad base of attachment to the uterus, was discovered. Not having an écraseur at hand, any further interference was obliged to be postponed until the following day, when chloroform having again been given, it was found easier to detach the tumour from the uterus by the fingers of the left hand than to apply the écraseur. No force was required to remove the tumour, which came away more readily than an adherent placenta. It grew from the inner surface of the *posterior* wall of the uterus. Just as the tumour was being withdrawn from the uterus, a rupture about an inch long was discovered in the *anterior* wall of the uterus. No bowel protruded, there was no hæmorrhage, and the uterus contracted well, the patient unfortunately dying of shock two hours after the operation.

Dr. Daly suggested that the rupture was owing to softening of the uterus, it being well known that anything which interferes with the normal "involution," as would of course this tumour, causes undue *softness* of the uterus.

Dr. HEYWOOD SMITH inquired whether any incision had been

made across the face of the tumour before enucleation was attempted.

Dr. DALY replied in the negative.

TWO-HEADED MONSTER.

Dr. BANTOCK exhibited a specimen where the bodies were united from the breast downwards. There were but two legs, with a third rudimentary one.

Dr. MEADOWS suggested that it would be well to present it to the Museum.

MIDWIFERY STATISTICS OF THIRTY-FIVE YEARS' PRACTICE.

COMPILED

By CLEMENT GODSON, M.D.,

FROM THE RECORDS OF HIS FATHER, CHARLES GODSON, F.R.C.S.

FULLY appreciating the value of statistics, I published in 1869, in the 'St. Bartholomew's Reports,' those of the midwifery practice of that hospital during the preceding seven years; 5734 deliveries were included in the same.

The valuable paper of Dr. Henry Cooper Rose read before the Society in May last suggested to me the idea of analysing the obstetrical records kept by my father during the time of his practice, an extensive one, in a very healthy locality, at Barnet, ten miles north of London, the practice a mixed one, including the wealthy and the poorest, obliged to seek shelter in the workhouse.

The period extended from April, 1842, to September of this year, in all thirty-five and a half years. I have divided the same into two parts, the first comprising that of my father when alone, and the second that in conjunc-

tion with a partner. I have been obliged to make this separation because of the frequency with which the forceps has been applied by the partner, which entirely alters the relative proportions of operative cases.

I propose to compare the results of the two periods with one another, and with the London hospital practice, as gathered from the St. Bartholomew's statistics already referred to, and I think that thus some light may be thrown upon the questions raised by Dr. Cooper Rose's paper, especially with regard to the number of stillborn children. I have drawn up six tables, the first containing the results of the most common presentations; the second the percentage of these; the third the placental and compound presentations; the fourth the twin presentations; the fifth those entailing operations; and sixth the maternal deaths.

In the single practice there were 2203 deliveries, of which 35 were twin births 1 in 63, or 1·58 per cent. In the combined practice 1020 deliveries, of which 15 twin births, 1 in 68, or 1·47 per cent. In the hospital practice there were out of 5784 deliveries 49 cases of twins, 1 in 117·02, or 0·855 per cent.

In the single practice, of the 2238 children born 1239 were males 1 in 1·80, or 55·36 per cent.; in the combined practice, of the 1035 children born 541 were males, 1 in 1·91 or 52·27 per cent., and in the hospital practice of the 5783 children born 3065 were males, just 53 per cent. So that in the single practice the excess of males over females was roughly 4½ per cent., in the combined practice 7½ per cent, and in the hospital practice 6 per cent.

In the single practice 2114 were head presentations, 95·96 per cent; in the combined practice 970, 95·1 per cent.; and in the hospital practice 5502, 95·95 per cent—a wonderfully equal proportion.

Of the face presentations, in the single practice there were 4 cases, 1 in 551, or 0·18 per cent; in the combined practice, 1 in 255, ar, 0·39 per cent; and, in the hospital practice, 1 in 441·08, or 0·24 per cent.

Of breech presentations, in the single practice there were 13 cases, 1 in 169·4, or ·59 per cent.; in the combined practice, 1 in 63·75, or 1·57 per cent.; and in the hospital practice, 1 in 89·6, or 1·12 per cent.

Of presentations of the lower extremity, in the single practice there were 8 cases, 1 in 275·4, or ·36 per cent.; in the combined practice, 1 in 255, or 0·39 per cent., and in the hospital practice 1 in 163·83, or 0·61 per cent.

Of presentations of the upper extremity, in the single practice there were 13 cases, 1 in 169·4, or ·59 per cent.; in the combined practice, 1 in 170 or 0·58 per cent., and in the hospital practice, 1 in 337·3, or 0·30 per cent. a much lower proportion.

Of the compound presentations, which are very various, in the single practice there were 1 in 200, or 0·5 per cent.; in the combined practice 1 in 340, or 0·29 per cent.; and in the hospital practice 1 in 409·57, or 0·24 per cent.

In the single practice 2121 children were born living, 94·77 per cent.; 117 were stillborn, 5·23 per cent. In the combined practice 983 were born living, 94·9 per cent.; and 52 were stillborn, 5·1 per cent.; while in the hospital practice 95·17 were born living, and 4·83 were stillborn.

Of maternal deaths, in the single practice the average is 1 in 367, in the combined practice 1 in 510, and in the hospital practice 1 in 273. It must be, however, borne in mind that one death makes a great difference in the percentage in so small a number of cases; and that in hospital practice the patients are not followed out as closely as they are in private practice. If ill they may be removed to other hospitals, and the result be unrecorded. This will probably account for the apparently better results which appear in the hospital practice.

In the complete placental presentations the practice was to get the hand into the uterus, and to turn; in all the four cases the children were born living, and the mothers recovered.

The most notable feature is with regard to the application of the forceps. In the practice of my father alone it was applied once in 66·757 cases, whereas in the combined practice once in 9·80 cases. Let us compare the results to the children. It has been noted that in the single practice 5·23 per cent. were stillborn, and in the combined practice 5·1 per cent. There is very little difference. The percentage of stillborn children is even greater than in Dr. Cooper Rose's practice, where it reached 1 in 30. The question was raised, Why are there so many stillborn children? I believe the explanation may be found in this, that more than one half are premature births. In the whole practice which I am quoting, out of the 77 stillbirths, occurring with head presentations, no less than 42 were premature. No ill result appears to have taken place to the mothers from the more frequent application of the forceps, and it is probable that by such much suffering has been spared to them, and much loss of time to the practitioner. It is a question, however, whether so great a difference in the frequency of applying the forceps is altogether justifiable, and whether a little patience would not in many cases have overcome the difficulty. I believe that up to a few years since the public dread of instrumental delivery was so great that no practitioner dare have frequent recourse to it, and that, therefore, the forceps in the earlier years of this practice was not employed as frequently as it might have been, with advantage. Once in 66 cases is not therefore a ratio to uphold. But, on the other hand, I am convinced that there is now a gradually increasing tendency to the too frequent, and altogether needless employment of this instrument. The practitioner has other engagements of a pressing character. The pains are not as frequent, or as strong as he would wish; the patient cries out with pain; he looks at his watch, and argues, why not put on the forceps? It will be most inconvenient to me if I cannot keep my appointment; the patient will be very glad to get out of her suffering,

and no harm is likely to ensue. I maintain, however, that such arguments should never be employed. So long as there is a prospect of nature completing the delivery without injury to the mother, or risk to the life of the child, the use of the forceps is unnecessary, and altogether unjustifiable.

In the practice of the hospital the forceps was employed once in 44·8 cases, or 2·23 per cent. Taking into consideration, in conjunction with this, the number of stillborn children, it amounted to 4·83 per cent., or 1 in every 20·7 deliveries.

Craniotomy was performed three times in the single practice, once in 734 deliveries; in the combined practice only once in 1020.

In the single practice induction of premature labour was resorted to four times, once at the seventh month, it having been ascertained that the child was dead in utero; once for a severe attack of hæmorrhage at the seventh month, the membranes were perforated, the head presented, and the child was turned; the mother sank half an hour afterwards from exhaustion. The third case was a remarkable one, the abdomen was enormously distended, giving rise to distressing dyspnœa; the expected time for labour was October, but on June 20th a consultation was held with Dr. Robert Lee, who ruptured the membranes, and allowed about a gallon of liquor amnii to escape. Labour pains soon occurred, the head presented, and in eleven hours' time a male child was born in a state of decomposition; it weighed 12½ lbs.; a very large placenta followed, which was found to weigh 12 lbs. The patient recovered without any bad symptom.

The fourth case was one of puerperal convulsions at the seventh month. The treatment is thus recorded: "Purging, leeches, head shaved and cold applied, bleeding and ⅛ grain of antim. tart. every hour. The patient remained unconscious, and the convulsions continued severely for thirty-six hours. The membranes were then ruptured, and labour pains followed. Very soon the convulsive

attacks ceased, and consciousness partially returned. In about twelve hours delivery took place, the child stillborn. The patient made a complete recovery, a blister having been applied to the nape of the neck, and free purgation having been kept up. This occurred in 1853; though successful, it is hardly the treatment which would be pursued in the present day. Although the records show that several cases were treated similarly, it was not universally so. In one case, as far back as 1842, labour was brought on at the eighth month by dilating the os uteri, and turning the child, which was born living. The convulsions immediately subsided, and the patient made a rapid recovery.

In a third case the convulsions occurred during labour, when the head was at the outlet, all uterine contractions ceasing. The patient was bled at the arm, and, not being able to keep her quiet to apply the forceps, chloroform was administered, the forceps was then applied, and the child was born living. No bad symptom followed.

In the fourth case bleeding was again had recourse to, with the administration of tartar emetic and Tinct. Opii. The forceps was applied and the child born living. This occurred in 1849. The next case was in 1852. The convulsions occurred for forty-eight hours before delivery, at the eighth month, of a stillborn child. The patient continued insensible for twenty-four hours afterwards. The treatment was free bleeding at the arm, calomel, stimulating enemata, a blister to the nape of the neck, the head shaved and covered with a blister. The patient recovered.

In the combined practice puerperal convulsions have only once been met with; the note says that premature labour was brought on at the seventh month on account of severe convulsions, delivery was completed by the forceps, and the child stillborn. The patient died about a quarter of an hour afterwards.

Although the treatment of puerperal convulsions twenty-five years ago is so directly opposed to that of

the present time, it will be observed that the result in each case was all that could be desired. The heroic treatment provokes a smile, but it is a question whether we have not now reached the other extreme with regard to venesection.

The deaths of the mothers occurred from a variety of causes. I propose to give a short account of each.

The first was a patient confined in the workhouse; the forceps was applied on account of prominence of the sacrum. The patient progressed favorably for a fortnight, when she took cold by sitting between two open windows, and died five weeks after delivery. The exact cause is not stated.

The second was attended by my father's assistant, who reported that the placenta was very firmly adherent to the anterior wall of the uterus, the greater portion of which was with difficulty removed. Hæmorrhage came on some hours afterwards, and continued more or less till her death, which occurred forty-seven hours after delivery. No mention is made of the treatment adopted. The date is 1855, at which time the application of solution of perchloride of iron had not been proposed.

The third death was from puerperal fever, eleven days after delivery.

The fourth was from peritonitis which set in on the third day, and resulted in death on the following. The patient was confined in the workhouse, and the labour, a very tedious one, completed by the forceps.

The fifth was one of severe accidental hæmorrhage, the os uteri was but slightly dilated, and the presentation could not be felt, a female catheter was passed, and the membranes perforated. The hæmorrhage ceased with this, but recurred again violently after the interval of half an hour; there was no time to be lost, the os uteri was dilated as rapidly as possible by the hand, and the child turned; the placenta followed immediately, the uterus would not contract, although it was tightly grasped by the hand on the abdomen, and cold water injected into

the uterus; the hæmorrhage continued until the death of the patient, half an hour afterwards.

The sixth death was from puerperal peritonitis.

None of the deaths bore any connection with one another.

In the combined practice the first death was from profuse secondary hæmorrhage, a few hours after delivery, the patient dying before she could be reached.

The second death has been described among the cases of puerperal convulsions.

It appears more than probable that the patient described as catching cold, a fortnight after delivery, did not die from any puerperal cause. If this, therefore, be excluded, it leaves the death rate as low as 1 in every 460 women confined, or 7 deaths in thirty-five years' practice, 3223 women having been attended.

It is hoped that the following tables may prove useful for reference, and that they may serve to induce others to record reliable statistics of extensive midwifery practice.

TABLE I.

Single Practice.

Years.	Total number of deliveries.	Twins.	Sex.		Presentation.*						Children born.		Mothers.	
			Boys.	Girls.	Head.	Face.	Breech.	Lower extremity.	Upper extremity.	Compound.	Living.	Still.	Recovered.	Died.
1842 to 1869	2203	35	1239	999	2114	4	13	8	13	11	2121	117	2197	6

* Twins are not included in these tables.

Combined Practice.

Years.	Total number of deliveries.	Twins.	Sex.		Presentation.						Children born.		Mothers.	
			Boys.	Girls.	Head.	Face.	Breech.	Lower extremity.	Upper extremity.	Compound.	Living.	Still.	Recovered.	Died.
1869 to 1876	1020	15	541	494	970	4	16	4	6	3	983	52	1018	2

TABLE II.—*Percentage Table.*

Single Practice.

Years.	Twins.	Sex.		Presentation.						Children born.		Mothers dead.
		Boys.	Girls.	Head.	Face.	Breech.	Lower extremity.	Upper extremity.	Compound.	Living.	Still.	
1842 to 1869	1·58	55·36	44·64	95·96	0·18	0·59	0·36	0·59	0·5	94·77	5·23	0·27

Combined Practice.

Years.	Twins.	Sex.		Presentation.						Children born.		Mothers dead.
		Boys.	Girls.	Head.	Face.	Breech.	Lower extremity.	Upper extremity.	Compound.	Living.	Still.	
1869 to 1876	1·47	52·27	47·73	95·1	0·39	1·57	0·39	0·58	0·29	94·9	5·1	0·19

TABLE III.

Single Practice.

Total number of deliveries.	Prolapsus funis with head.	Placenta presenting.								Compound presentations.							
		Complete.	Partial with		Total.	Children born.		Mothers.		Arm and foot.	Arm and funis.	Hand and funis.	Foot and hand.	Face and hand.	Total.	Children born.	
			Head.	Arm.		Living.	Still.	Recovered.	Died.							Living.	Still.
2203	0	3	2	2	7	4	3	7	0	2	4	1	1	1	9	3	6

Combined Practice.

Total number of deliveries.	Prolapsus funis with head.	Placenta presenting.							Compound presentations.				
		Complete.	Partial.	Total.	Children born.		Mothers.		Shoulder and funis.	Hand and breech.	Total.	Children born.	
					Living.	Still.	Recovered.	Died.				Living.	Still.
1020	1	1	0	1	1	0	1	0	2	1	3	1	2

TABLE IV.—*Twins.*

Single practice.

Total number of cases.	Presentations.									Children born.	
	Both head.	Both arm.	Head and breech.	Breech and head.	Breech and foot.	Foot and head.	Head and foot.	Head and arm.	Doubtful.	Living.	Still.
35	15	1	1	1	1	1	1	1	13	63	7

Combined practice.

Total number of cases.	Presentations.							Children born.	
	Both head.	Both arm.	Both breech.	Foot and head.	Foot and breech.*	Hand and breech.	Head and shoulder.	Living.	Still.
15	9	1	1	1	1	1	1	26	4

* Turning in both.

TABLE V.—*Operative.*

Single Practice.

Total number of deliveries.	Forceps.					Turning with head presentation.	Craniotomy.	Induction of premature labour.						
	Sex.			Children born.				For puerperal convulsions.	For decomposed fœtus.	For dropsy of amnion.	For accidental hæmorrhage.	Total.	Children born.	
	Male.	Female.	Total.	Living.	Still.								Living.	Still.
2203	18	15	33	31	2	1	3	1	1	1	1	4	0	4

Combined Practice.

Total number of deliveries.	Forceps.					Craniotomy.	Induction of premature labour.						
	Sex.			Children born.			For deformed pelvis.	For puerperal convulsions.	For accidental hæmorrhage.	Total.	Children born.		Mothers died.
	Male.	Female.	Total.	Living.	Still.						Living.	Still.	
1020	57	47	104	96	8	1	1	2*	1	4	2	2	1

1 arm presentation.

TABLE VI.—*Maternal Deaths.*

Single Practice.

Total number of deliveries.	Total number of deaths.	Causes.				
		Peritonitis.	Accidental hæmorrhage.	Inflammatory.	Accidental hæmorrhage.	Puerperal fever.
2203	6	2	1	1	1	1

Combined Practice.

Total number of deliveries.	Total number of deaths.	Causes.	
		Puerperal convulsions.	Post-partum hæmorrhage.
1020	2	1*	1

* A quarter of an hour after delivery by forceps.

Dr. PLAYFAIR said that last year, when Dr. Cooper Rose's valuable paper of a similar character was before the Society, he had pointed out that a low ratio of forceps operations was associated with a high fœtal mortality, and had advocated an increased frequency of forceps operations as calculated to lessen the fœtal deaths. He had then alluded to the remarkable results of Dr. Hamilton, of Falkirk, who had two successive series of cases, of 800 and 700, without a single stillbirth. He himself had attended nearly 300 consecutive cases without losing a single child. Now, the paper of to-night showed some results which certainly seemed difficult to understand. Here were two series of cases, in one of which the forceps was used once in sixty-six cases, in the other once in nine, and yet in both about one out of every twenty children were stillborn. He confessed he found it very difficult to reconcile such results with those he had already referred to. He had a strong conviction that increased frequency of forceps operations was truly conservative as regards the child, to say nothing of the mother, but these cases did certainly seem to him at first sight not quite to bear out that view. There must be

some explanation of so remarkable a discrepancy, and he asked Dr. Godson if he could throw any light on the matter.

Dr. HICKS, in reference to an allusion as to hospital statistics not being so reliable as those of private practice, stated that at Guy's patients were under observation for a month after the confinement, and that the death rate could be relied upon. It varied between 2½ and 7 per 1000. Before we could fairly estimate the death rate from forceps, we must first ascertain how frequently ergot had been given.

Dr. CHALMERS remarked that Dr. Hamilton's statistics were quite as likely to require explanation as Dr. Godson's, and from what he knew of the people and of medical practice in the district of Falkirk, he would be inclined to doubt the accuracy of so low a rate of mortality as Dr. Hamilton's statistics gave.

Dr. ROPER remarked there could be no doubt that the release of the child, during childbirth, from continued or long-preserved pressure by the timely use of forceps would diminish infantile mortality at birth, but the cases in which a child in its passage through the parturient canal became subjected to such an amount of pressure as to jeopardise its life were not of frequent occurrence, not nearly so frequent as to justify the present tendency to the early and frequent employment of forceps. The application of forceps long before the completion of the first stage of labour, as advocated by some obstetricians, especially those of the Dublin School, although it does diminish infantile mortality, it cannot reasonably be expected to reduce maternal mortality. On the contrary, the forcible distension of the maternal soft parts was liable to increase maternal mortality.

Dr. ROUTH stated that he had gone closely into the question as regards operative midwifery among the London poor and those of the manufacturing districts. Long forceps were more frequently used on account of deformities of the pelvis, and in these cases the risk to both mother and child was increased. Dr. Playfair states that we are justified in using them once in five cases. The late Professor Simpson had shown that the mortality during childbirth was greater in proportion to the number of hours they were left in labour.

Dr. PLAYFAIR, in answer to Dr. Routh, said that, at the risk of trespassing on the forbearance of the Society, he must ask permission to say a word in explanation of his previous remarks. He had not said that he himself advocated so frequent an application of the forceps as one out of five cases. On the contrary, he would deprecate running into so great an extreme. He would also strongly insist on the importance of distinguishing between the high and low forceps operations. The former he considered to be a serious matter, not to be lightly undertaken, and not without grave risk to the mother. His remarks applied solely to the low forceps operation. When the head was on the perinæum,

and merely delayed by the want of a *vis à tergo*, under these circumstances he held that the operation was perfectly easy, quite safe, and highly conservative both to the mother and child. He believed that, in such a state of things, the forceps were far safer and better than attempting to spur the fatigued and jaded uterus into action by oxytocic remedies, of the evil effects of which they had that evening seen a startling example. In justice to the Dublin school he must beg leave to correct what seemed to him an entirely erroneous representation of the practice advocated by the late distinguished master of the Rotunda. It is quite true that he said that, in certain rare and exceptional cases, it was justifiable to apply the long forceps when the cervix was only sufficiently dilated to insert the blades. But he carefully limited such cases to those in which craniotomy would otherwise be required; and it was certainly not the case that in Dublin the forceps were habitually and commonly used with an undilated cervix, as Mr. Roper implied.

Mr. GODSON said that, when he commenced practice, operative midwifery was looked upon by the general public in a very different light to what it is now. The news that "instruments had to be used to bring the child into the world" spread rapidly throughout the neighbourhood, and if he had used the forceps as frequently as is now recommended, there would have been very few applicants for his assistance as an accoucheur. He had made it a rule, to which he still adhered, never to apply the forceps so long as there was a prospect of labour being completed naturally, without injury to either mother or child. He had not considered the reason of the large percentage of stillbirths; he could only vouch for the correctness of the entries.

Dr. GODSON said, in reply to Dr. Playfair, that "facts are stubborn things." The statistics had been compiled most carefully, and their correctness could not be disputed. He believed that the large number of premature births accounted in a great measure for the stillbirths. He did not believe that the frequent application of the forceps would make other than a very small diminution in the percentage, and was insufficient to account for the extraordinary low proportion in Dr. Hamilton's practice, as compared with all other published records.

TWO CASES OF PREGNANCY COMPLICATED BY EXTENSIVE MALIGNANT DISEASE OF THE CERVIX UTERI.

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Case 1.—Ellen L—, æt. 41, was attended as a patient of the Guy's Hospital Lying-in Charity on February 24th, 1875. She had previously had eleven children born alive at full time; no miscarriages. Menstruation had been regular up to the commencement of her last pregnancy. When about one month pregnant she had rather sudden hæmorrhage, and similar attacks occurred again at intervals up to full term. When about seven months pregnant she lost a great deal of blood. The patient sent for assistance on the commencement of labour pains at full term, and the extern who saw her at once recognised the presence of advanced malignant disease of the cervix uteri. She was accordingly removed into the hospital, as it was evident that there would be great difficulty in effecting delivery.

On examination the whole circuit of the os uteri was found to be implicated by the carcinomatous growth. Posteriorly the mass was extremely thick and hard, extending to the pelvic wall, and implicating the vagina. Anteriorly the growth was somewhat softer, but there was an extensive friable mass infiltrating the anterior vaginal wall, and occupying the base of the bladder. The os uteri was dilated enough to admit one finger; the membranes were ruptured, and the vertex was presenting. There was considerable hæmorrhage on manipulation, and the appearance of the patient was anæmic and cachectic.

A Barnes' dilating bag was introduced into the cervix,

and the greatest dilating force which the strength of the india rubber would allow was maintained for about six hours. For a considerable portion of the time chloroform was administered, in order to promote, as much as possible, the yielding of the cervix. At length the largest dilating bag was ruptured by the distension, and the os had become dilated enough to admit three fingers. The patient's pulse had risen above 120. The fœtal head was resting in the third position, and was a good deal extended, the occiput having probably been pushed up by the dilating bag. The head was then perforated through the anterior fontanelle, and the cephalotribe applied. By repeated applications it was found easy to crush the whole vault of the skull, but, owing to the narrowness of the cervix, and to the fact that the face was resting far forward above the pubes, great difficulty was experienced in carrying the blades of the cephalotribe far enough forward to crush completely the base. Accordingly the head, flattened between the blades, refused to enter the rigid cervix. The difficulty of the operation was also increased by the fact that my left hand was at the time disabled, and I was therefore obliged to place the patient upon her right side, and adopt the inconvenient plan of introducing the upper blade of the cephalotribe first. For about three hours ineffectual attempts were made both by myself and my assistants to effect delivery. It might have been possible at this stage to perform version by the bipolar method, although the cervix would not yet admit the hand. I abstained from doing so, fearing that, owing to the contraction of the cervix and the upper part of the vagina, it might not have been possible to apply the cephalotribe to the after-coming head. I am disposed, however, now to think that version might have accelerated the delivery. At length the os had become so far dilated by the manipulations that it was possible to pass the whole hand through it. I then found it easy, carrying the hand up into the uterus, to adapt the blades of the cephalotribe centrally over the remaining portion of the base of

the skull, and complete its destruction. The head was then brought through the cervix, in the grasp of the cephalotribe, at the first attempt. No very great difficulty was experienced in extracting the body, which had become very flaccid, the fœtus having been dead for several hours. A humerus was, however, broken in the process. Delivery was completed within a few minutes from the time that the head was brought into the cervix.

Six hours after delivery the patient's temperature was 99·2°, pulse 100. In the evening the temperature rose to 101·0°, but on the third day it was normal. The discharge had then become extremely offensive, necessitating frequent antiseptic vaginal and intra-uterine injections. The patient did not suffer from any very serious constitutional symptoms, but from the time of delivery she was unable to retain her urine or to empty her bladder, and the catheter was used for some days. On the ninth day it was found that the friable tissue, which at the time of the operation was noticed at the base of the bladder, had given way, and a wide opening existed between the vagina and bladder, a broad bridge of carcinomatous tissue remaining intact between the fistula and the os uteri. The tissue which had sloughed away had been exposed to no pressure until after the head had been brought through the cervix, and it had, therefore, been compressed for a few minutes only. Nor had any injury been done to it by the cranial bones, since these were completely covered and protected by the soft parts of the scalp, as the head was withdrawn in the grasp of the cephalotribe.

On one occasion, on the evening of the twelfth day, the patient's temperature rose to 103·4°, and her pulse to 114, but from the fourteenth day onward it remained nearly at the normal level. On the thirty-fourth day profuse hæmorrhage came on, the first which had occurred since delivery. This continued in great amount for four days, and recurred frequently afterwards. It was kept in check by the daily use of a lotion containing a drachm of solid perchloride of iron to a pint of water. This passed freely

into the bladder, but did not appear to set up any irritation. On the sixtieth day the patient was sufficiently well to return to her home in Scotland.

A table of the temperature and pulse for fourteen days after delivery is appended.

Date.	Temp.	Pulse.	Date.	Temp.	Pulse.
Feb. 25—M.	99·2° ...	100*	Feb. 4—M.	100·0° ...	96
E.	101·0° ...	100	E.	100·2° ...	100
26—M.	100·6° ...	98	5—M.	100·4° ...	96
E.	101·2° ...	104	E.	101·5° ...	110
27—M.	98·4° ...	92	6—M.	101·0° ...	88
E.	99·4° ...	96	E.	101·3° ...	110
28—M.	99·2° ...	106	7—M.	99·4° ...	104
E.	100·6° ...	118	E.	102·3° ...	104
March 1—M.	101·2° ...	108	8—M.	101·8° ...	84
E.	101·0° ...	108	E.	103·4° ...	114
2—M.	98·6° ...	112	9—M.	99·4° ...	96
E.	99·6° ...	96	E.	101·2° ...	88
3—M.	99·2° ...	98	10—M.	99·2° ...	84
E.	100·8° ...	104	E.	99·8° ...	90

Case 2.—Agnes T—, æt. 31, came under my care as an out-patient at Guy's Hospital, at the end of February, 1875. She was an extremely stout, florid woman. She had had nine children and one miscarriage; the last confinement took place three months previously. Up to the commencement of her last pregnancy menstruation had been regular; during the pregnancy there had been no sanguineous discharge, but since delivery there had been constant metrorrhagia, accompanied occasionally by clots. She suffered also pain in the hypogastrium and back.

On examination an epitheliomatous growth from the cervix was recognised. The uterus was quite moveable, and there was no infiltration of surrounding tissues. The patient was recommended to come immediately into the hospital with a view to the removal of the growth, but she delayed doing so until May 1st. The epithelioma then appeared to have been growing very rapidly, and the cervix uteri had become very broad at its base. The

* Six hours after delivery.

patient had been suckling her child up to the time of her admission, and constant metrorrhagia had continued.

On May 3rd chloroform was administered, and the growth was removed by the galvanic cautery écraseur. The cervix was removed to the level of its insertion into the vagina, but the section appeared to pass through diseased tissue, and the stump which remained showed great broadening of the cervix, although the uterus was still quite moveable.

On 15th, twelve days after the operation, the slough having come away, Potassa Fusa was freely applied to the stump, and afterwards the Liquor Ferri Perchloridi Fortior. As it afterwards turned out, the patient must have been in the fourth week of pregnancy when the cervix was amputated, and in the sixth week when the caustic was applied to the stump. She had herself no suspicion of pregnancy until some months after the operation.

On 18th pain had ceased, and on the 22nd the patient went out.

About three months later she again made her appearance among my out-patients, complaining of varicose veins, having had no hæmorrhage nor pain since leaving the hospital. The existence of pregnancy was then ascertained. The place of the cervix was occupied by a hard contracted cicatrix, the surface of which was apparently healthy. The upper part of the vagina was funnel-shaped; there was no morbid discharge.

On the 29th of November she was again admitted into the hospital under my care. There was then extreme varicose distension of the veins of both legs, and in the right leg several large bunches of veins were acutely inflamed and filled with clot, both in the calf and in the thigh. The patient was still very stout and ruddy, and had had no hæmorrhage nor any other morbid discharge since the operation. The size of the uterus appeared to correspond to a pregnancy of nearly eight months.

Under the influence of rest in bed the inflammation of the veins quickly subsided.

On the 4th of January the patient had considerable hæmorrhage, the first which had occurred since the operation. From this time she had continuously pains resembling those of the first stage of labour, but there was no dilatation of the os.

On the evening of the sixth she said that the waters had broken, and a large quantity of fluid, apparently liquor amnii stained with blood, came away. The cervix would not admit the finger, and it was with difficulty that the sound could be passed through it. It was then found that the narrow cervical canal was still more than an inch long, notwithstanding the amount of tissue which had previously been removed. The whole circuit of the os was surrounded by malignant growth, but the mass was much thicker posteriorly than in front.

At 2 p.m on January 7th two laminaria tents were passed into the cervix. This was rendered difficult from the fact that the os was high up and far back, and that there was a sinus running into the cancerous tissue posteriorly, into which the tents tended to slip, instead of passing through the internal os. Very frequent antiseptic injections were used from this time, as the discharge had become very offensive.

On the morning of the 8th the tents were removed, but the internal os was found to be still undilated. A single laminaria tent was then passed into it.

At 10 p.m. this was removed, and was found to be marked by a deep constriction. The cervix now admitted the finger, and the vertex was found to be presenting, covered by the membranes, but without any bulging of liquor amnii. Chloroform was then administered, and I succeeded in passing the medium-sized dilating bag into the cervix. The administration of chloroform was continued for some time, and a weak solution of iodine was frequently injected into the vagina.

At the end of seven hours and a half, at 5.30 a.m. on the 9th, the bag was expelled, pains having continued frequent during the interval. The os was found to be of

the size of a crown-piece. The dilatation appeared to have taken place by the yielding of the anterior margin only, which had become comparatively thin, although still hard. The membranes were not ruptured within the circuit of the os, and were bulged by a little liquor amnii.

At 6.30 a.m. the membranes ruptured, and the os would then admit three fingers.

At 10.30 a.m. no further dilatation of the os had taken place, and the patient's pulse had risen to 116. Chloroform was then administered, and I performed bipolar version, and proceeded to make traction on the leg. The uterus also acted vigorously, and after some time the breech was brought down externally. The neck of the child, however, was found to be firmly gripped by the cervix, and very considerable traction was required to bring it through. Its heart was beating slowly, and after artificial respiration had been performed for about half an hour, it revived, somewhat to the surprise of those present.

Rather considerable bleeding from the cervix took place after delivery. It was at length checked by the repeated application of swabs with tincture of iodine. The vaginal discharge continued extremely offensive notwithstanding the injection of disinfectants into the uterus as well as into the vagina.

On the 10th the abdomen was tympanitic, and the uterus could be felt, enlarged and tender. Opium was administered, and four grains of quinine every three hours.

On the 12th the abdomen had become very tender, and distended coils of intestine could be seen. The patient vomited all nourishment and medicine. Temperature 100·6°; pulse 118. Brandy and ice only with soda water were then given, and hypodermic injections of morphia. The next day she was able to retain a little milk with lime water, and from that time she gradually improved. The temperature never rose above 102·6°. Hæmorrhage

recurred from time to time, and on February 4th Potassa Fusa was applied to the cervix, and afterwards the Liquor Ferri Perchloridi Fortior.

On February 12th the patient went home, no hæmorrhage having again recurred. The baby was doing well, and milk had continued throughout.

On the 29th of April she again made her appearance among my out-patients. The disease had then made a great advance. The uterus was enlarged, nearly up to the umbilicus. Nearly the whole of the vaginal walls was infiltrated, and the position of the cervix was occupied by a deeply ulcerated cavity.

A table of pulse and temperature for fifteen days after delivery is appended.

Date.	Temp.	Pulse.	Date.	Temp.	Pulse.
Jan. 9—E.	101·0°	109*	E.	101·2°	94
10—M.	99·2°	104	Jan. 18—M.	99·5°	84
E.	100·4°	84	E.	101·0°	84
11—M.	100·4°	86	19—M.	99·6°	84
E.	100·9°	96	E.	100·8°	92
12—M.	99·8°	101	20—M.	99·8°	84
E.	100·6°	118	E.	101·0°	88
13—M.	99·1°	100	21—M.	100·1°	84
E.	100·8°	104	E.	101·2°	84
14—M.	100·0°	100	22—M.	101·0°	92
E.	100·5°	94	E.	102·6°	92
15—M.	99·8°	96	23—M.	98·4°	84
E.	101·0°	102	E.	100·6°	80
16—M.	99·4°	92	24—M.	99·0°	72
E.	101·4°	96	E.	100·0°	76
17—M.	99·4°	90			

Remarks.—At a recent discussion on the subject of delivery obstructed by malignant disease of the cervix uteri, an opinion was expressed by several speakers in favour of a somewhat early resort to Cæsarean section in cases in which the disease was extensive, or involved the whole circuit of the os. I think, therefore, that these two cases may be of interest, as showing not only that de-

* Eight hours after delivery.

livery may sometimes be effected at length by the natural passages in cases in which the whole circle of the os is diseased, and in which, at first sight, Cæsarean section seems to be the only resort, but also that the patients may be carried safely through the grave peril of septicæmia after delivery.

The fact that, in the second case, the cervix was amputated by the galvanic cautery in, probably, the fourth week of pregnancy, without producing abortion, may be compared with the similar occurrence related by Dr. Savory, and published in the 'Obstetrical Transactions' for 1875. In that case an epitheliomatous growth was removed by the wire écraseur in St. Bartholomew's Hospital from the cervix uteri of a woman who was pregnant nearly five months, the pregnancy having been overlooked. Such instances, however, should not, I believe, lead us to adopt the conclusion that it is ever desirable, when pregnancy is recognised, to amputate the diseased cervix, rather than first to eliminate the pregnancy. For experience shows that, in cases of malignant disease of the cervix, there is a considerable natural tendency to abortion or miscarriage even when there is no interference with the uterus, and, if the puerperal state were to intervene soon after the operation, it would gravely add to the patient's risk.

The important question arose at a later period with reference to this patient, whether she should be allowed to go to full term, or whether abortion or premature labour should be induced. From the entire absence of hæmorrhage or any other morbid discharge after the amputation of the cervix by the cautery, I was led to underestimate the extent of diseased tissue which remained, and to think that a considerable amount of spontaneous dilatation might be expected at full time, when the cervix might be more disposed to yield than at an earlier period. If I had supposed the thickness of morbid growth all round the os to be as great as it afterwards proved to be, I should probably have induced abor-

tion. The fortunate result, however, by which both mother and child were saved, may be regarded as a justification for running some risk. There is another consideration, however, which has also to be taken into account in such cases, namely, the increased rapidity of development of the morbid growth which generally takes place under the influence of pregnancy, and which, in this instance, was very marked. It may be a question whether this is not a sufficient reason to justify our interfering at once in the interest of the mother, and cutting short the pregnancy at the earliest possible opportunity.

It would seem from the history of the case that, when full term had arrived, and uterine contractions had continued for about three days, the membranes ruptured at some point at a distance from the os uteri, and the greater part of the liquor amnii escaped. It is indeed evident that, if there is no dilatation of even the internal os, and therefore no unsupported portion of the membranes, they are not more likely, if they are ruptured at all, to be ruptured near the os than at any other point. The result was that a part of the liquor amnii was retained, and afterwards did some service in assisting the dilatation of the cervix.

There is one other point of some interest in connection with this patient, namely, the occurrence of phlebitis. It will be remembered that it is stated by Trousseau that obliterative phlebitis is an important diagnostic sign of internal cancer, and that if, in any case in which there is ground for hesitation between a diagnosis of chronic gastritis, simple ulcer of stomach, or cancer, the veins of the arm or leg become inflamed, all doubt may be dispelled, and a positive opinion pronounced that cancer is present. I have not in other cases had experience of any special association of phlebitis with the earlier stages of uterine cancer, but I have more than once met with a patient who first came under treatment for phlebitis of the veins of the leg, and in whom some months later the signs of cancer of the stomach became apparent.

Dr. MEADOWS thought, as a rule, it was better to resort to Cæsarean section, as, although in these two cases the patients fortunately recovered, the maternal risk was so great, and there was an almost uniform death of the child where delivery was attempted *per vias naturales*. In the first case the dilating bag changed the position of the presenting head. This fact he had noticed in another case, and it would be interesting to know the experience of others on this point.

Dr. GODSON thought that the information derived from Dr. Galabin's case of the amputation of the cervix during pregnancy without abortion following was in direct support of the recommendation he had made at a former meeting, that the cervix should be amputated in cases of epithelioma notwithstanding the existence of pregnancy. He would never hesitate if there were a prospect of removing the whole of the diseased part. He had only once used Barnes' bags for induction of premature labour, and in that case the head was converted into a shoulder presentation.

Dr. AVELING thought Dr. Galabin's paper a valuable contribution to obstetric knowledge. He had attended a case in which at first the idea of Cæsarean section was entertained, three fifths of the anterior and lateral parts of the cervix being involved. This extreme measure was, however, avoided by dilating the cervix carefully with the fingers, perforating and turning. A mass of diseased tissue the size of a hen's egg was nearly detached during delivery, and was easily removed afterwards. Antiseptic injections were used, and the mother recovered without a bad symptom. He congratulated Dr. Galabin on the success of his second case, but thought in most cases where the disease affected the whole cervix the removal of the fetus by abdominal incision would not only be justifiable but necessary.

Dr. EDIS referred to the case he had brought forward last year, where delivery was accomplished *per vias naturales*, the child living; the mother succumbing to pyæmia from the pressure and bruising of the soft parts that had taken place during the extraction of the head by means of the forceps.

Dr. HICKS thought the fact of the head being pushed aside was not a common result from the employment of Barnes' bags; this might easily be overcome by drawing off some of the liquor amnii, or by the hand externally pressing the head down.

Dr. MEADOWS said the accident was most likely when the pelvic brim was contracted.

Dr. ROPER stated that he had modified the shape of the bags, and would exhibit them at the next meeting.

Dr. GALABIN said the case recorded was the only one in which he had found the head to be displaced by the use of dilating bags applied by himself. He had, however, met with two cases in

which they had been used by others, and the funis had become prolapsed in consequence, and one in which a vertex had been converted into a shoulder presentation. He thought that considerable risk would be run by the amputation of an epitheliomatous cervix in a case of ascertained pregnancy, for he had met with two or three instances in which, while anxious deliberation was being held whether abortion should be induced, nature came to the rescue and spontaneous abortion occurred. There was therefore a tendency to abortion in such cases, and it would be likely to be excited by an operation. The peril involved by the association of the puerperal state with a recent amputation of the cervix was shown by a case recorded by Dr. Heywood Smith in which the cervix was amputated for epithelioma shortly after delivery, and the patient quickly died from septicæmia.

NOVEMBER 1st, 1876.

WILLIAM O. PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

Present—52 Fellows and 15 visitors.

Books were presented by Dr. H. F. Campbell, Dr. J. Roussel, of Geneva, and the "Société des Sciences Medicales de Lyon."

The following gentlemen were admitted Fellows of the Society:—Francis John Marshall, M.R.C.S., Richard Jas. Maitland Coffin, M.R.C.P. Ed., and Henry Barton L. Smith, M.B.; and the following were declared admitted:—Richard Farncombe, M.R.C.S. (Birmingham), Fred. E. Manby, F.R.C.S. (Wolverhampton), Joseph Quirke, L.R.C.P. Ed. (Birmingham), and Herbert B. Spurgin, M.R.C.S. (Northampton).

The following gentlemen were elected Fellows:—George L. Clay, M.R.C.S. (Birmingham), Ernst R. G. Groth, M.D., William Hoar, M.R.C.S. (Maidstone), Neville Holland, M.R.C.S., Allen Piggot, L.R.C.P. Ed. (Beckenham), and Henry Thornton Wharton, M.A., M.R.C.S.

The following gentlemen were elected Corresponding Fellows of the Society:—P. Budin M.D. (Paris), James R. Chadwick M.D. (Boston, Mass.), James R. Lusk, M.D. (New York), and Oscar Prevôt, M.D. (Moscow).

The following gentlemen were proposed for election:—Gomer Davies, L.R.C.P. Ed., William Henry Maberly, M.B., Dawson Nesbitt, M.D., Charles Oakes, M.B. (Leamington), H. Campbell Pope, M.B., and Woldemar Snegiereff, M.D. (Moscow).

CASE OF CÆSAREAN SECTION, PERFORMED ON ACCOUNT OF CICATRICIAL OBLITERATION OF THE VAGINA.

By A. L. Galabin, M.A., M.D.,
ASSISTANT OBSTETRIC PHYSICIAN TO GUY'S HOSPITAL.

The following case is one of a very unsatisfactory kind because the patient only came under observation at a stage at which all treatment was almost, if not absolutely hopeless, but it may be of interest on account of its rarity.

Mary A— was married at the age of 36. Two years after, in 1873, her first confinement took place. She was two days in labour, and was attended, as she said, by a "cheap doctor," who eventually sent for aid to the Surrey Dispensary. It could not be ascertained precisely what operation was performed, but she stated that she was delivered by instruments, and that the child had to be destroyed. She recovered fairly well, but incontinence of urine commenced two weeks after delivery.

Seven weeks after delivery she was admitted into Guy's Hospital under Dr. Braxton Hicks for vesico-vaginal fistula. The finger could be passed into the bladder through an opening just behind the pubes, and no trace of the urethra remained. The vaginal walls were indurated and encrusted with phosphates. She remained in the hospital for five months, and was seen by several

surgeons, but it was considered hopeless to attempt any operation for the relief of her condition. When she left the vagina had become so contracted that it would not admit the tip of the little finger.

After this time menstruation never recurred, but at the end of about a year she began to have periodical pains every month. Notwithstanding that the constriction thus appeared to have been close enough to cause retention or suppression of menses, and that from the condition of the parts it seemed impossible that any marital intercourse could take place unless the rectum were used for the purpose, she again became pregnant, recognising her condition only when she felt the movements of the child. Labour pains commenced on October 2nd, 1876, but continued slight in character.

The fœtal movements ceased to be felt on October 4th. Not until October 5th did she send for assistance. She was then seen by an extern obstetric attendant from Guy's Hospital, who unfortunately failed to recognise her condition. He found labour pains still slight, and thought that the presenting part was as yet out of reach. In all probability he must have passed his finger into the rectum, which was drawn far forward towards the pubes by the adhesions.

The patient did not send again until two days later, October 7th, on the morning of which day she had had a severe rigor, which was repeated frequently during the day. She was then found to have a pulse of 130, and temperature of 101°. The pulse was full and strong, although so rapid. After much persuasion the patient was induced to consent to enter the hospital. She was brought thither about 3 a.m. on Sunday, October 8th, the seventh day of labour, and was placed in the room set apart for ovariotomy patients. She had then become much more exhausted, pulse 150, fluctuating with the respiration, which was rapid and grasping. The vulva was found to end in a funnel-shaped depression, having intensely hard walls, from which a small quantity of

offensive fluid was escaping. A No. 6 catheter could be passed through the constriction, and its end felt from the rectum. A No. 7 catheter would not pass. Directed a little more forwards, the catheter passed into the bladder.

Had the patient come earlier under observation it might have been a question whether by incision and dilatation a passage might have been made for the child through the pelvis, although this could scarcely have been done without laying open widely both bladder and rectum, and exposing the patient to a very great risk of septicæmia. As, however, it was evident that she could not survive many hours unless rapidly delivered, I decided that Cæsarean section, if anything, offered the only chance of life, and therefore resolved to perform it.

The anæsthetic used was ether. On opening the uterus the placenta came into view attached in front towards the upper part. Extending the incision downwards an arm was seen, and passing my hand under the placenta I removed first the head and shoulders of the child, which lay at the top of the uterus. A little fœtid gas escaped at the first incision, and the contents of the uterus were horribly decomposed, and its surface covered with greenish slough. No part of the fœtus had descended into the cervix, although it was dilated enough to admit two fingers. In order to secure an outlet by the vagina, using as a guide the No. 6 catheter previously passed, the trocar used for puncture per rectum was passed through the constriction and the canula left in place. Meantime not the slightest contraction of the uterus could be procured, although a drachm of liquid extract of ergot, diluted with water as recommended by Dr. Atthill, had been injected subcutaneously immediately the uterus was opened. Manipulation and application of ice to its internal surface were alike fruitless. I used to unite the uterine wound sutures of thick carbolised gut, notwithstanding the warning of Dr. Meadows that they are untrustworthy, thinking, from experience of them in other cases, that they might be trusted for at least

several days, and that if the peritoneal edges of the wound were turned inward, so as to come in contact, union would take place within that time, if at all. As the condition of the patient was becoming desperate, notwithstanding subcutaneous injection of ether, perchloride of iron was at length applied to the placental site, but even this induced no uterine contraction, nor did it absolutely stop the bleeding. The patient expired just as the last suture was placed in the uterus.

Post-mortem it was found that there was no contraction of the pelvis whatever. The specimen exhibited shows that there remains a small pouch at the upper part of the vagina above the constricted portion, which is embedded in densely hard tissue. The opening into the bladder, starting from the apex of the funnel-shaped depression, has the appearance of consisting of the remnant of the posterior part of the urethra, although, two and a half years before, it was described as being a fistula, easily admitting the finger. Incontinence of urine had been permanent, and the patient's husband stated that her condition had not altered for the last two years. No abnormal clots were found in the uterine or other veins, except near the surface of the uterus itself as the result of the use of the perchloride of iron.

Dr. Meadows thought there could be no doubt as to the propriety of the treatment adopted by Dr. Galabin, but he took exception to one point in the operation, viz. the employment of catgut sutures in the uterus; for not only in his (Dr. Meadows') case, to which Dr. Galabin had referred, but also in another case operated upon by Dr. Routh, the catgut sutures had most signally failed, and, so far as could be told, the failure was in each case due to the sutures, which gave way some time after the operation and allowed the wound in the uterus to gape open. He suggested also that, as in his own case, the employment of the interrupted current would have been most useful in restraining hæmorrhage and securing firm contraction of the uterus.

Dr. Rogers, in reference to a remark of one of the Fellows, said he regretted the absence of his colleague Dr. Routh, who would not have used catgut ligatures had he been aware of their

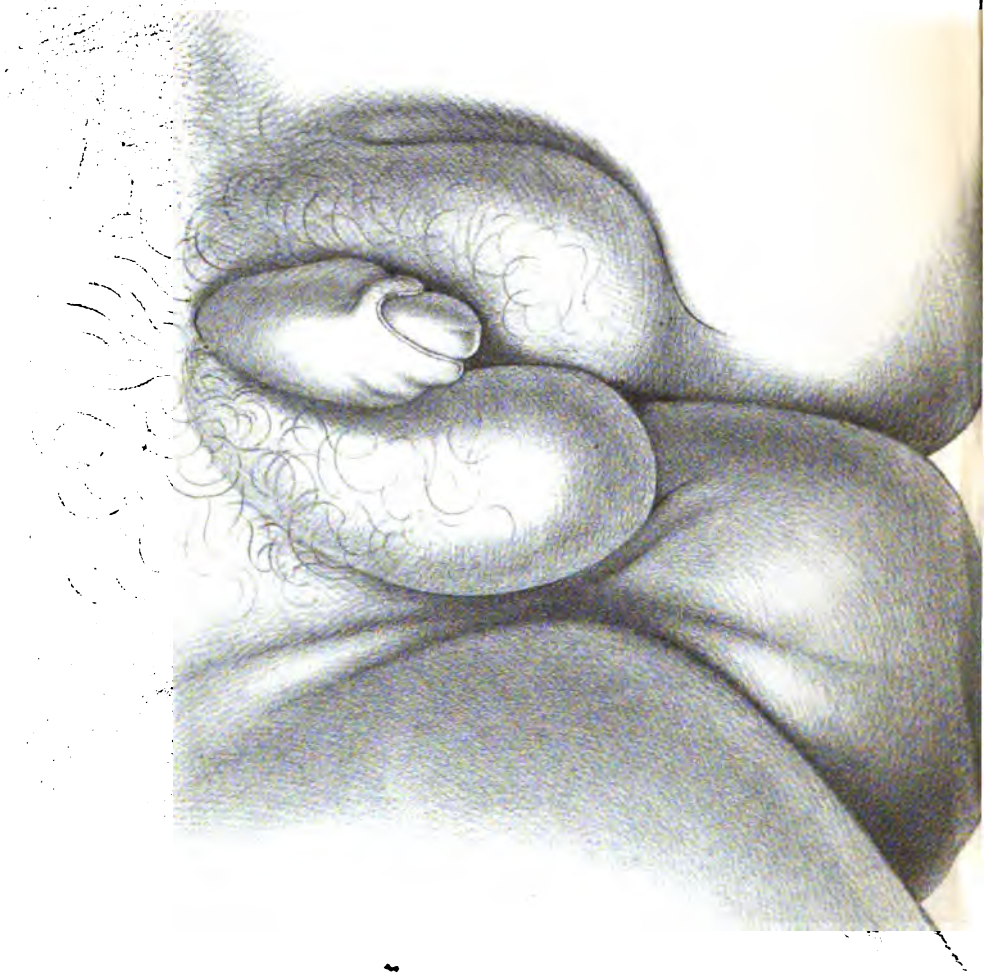
failure in the hands of Dr. Meadows. He had recently seen a lady who had just recovered from the Cæsarean operation. No ligatures had been used to the uterus. The gentleman who operated was not a Fellow of the Society, and this was his second successful operation without ligatures. The operator had waited until firm contraction of the uterus had taken place, so he closed the peritoneal cavity, and he thought this contraction was brought about by the fingers being pressed on the interior of the uterus; the administration of several doses of liq. ergotæ no doubt aided the contraction. Dr. Rogers had also seen two successful cases of Cæsarean section, where silver sutures had been used to close the uterus; he had been present at an unsuccessful case where silver sutures were also used; in this case he believed the ill success may have been caused by putting in the sutures before firm contraction had taken place.

CASE OF EXTREME HYPOSPADIAS IN A CHILD WHO HAD BEEN BAPTISED, BROUGHT UP, AND EDUCATED AT A LARGE GIRLS' SCHOOL AS A FEMALE.

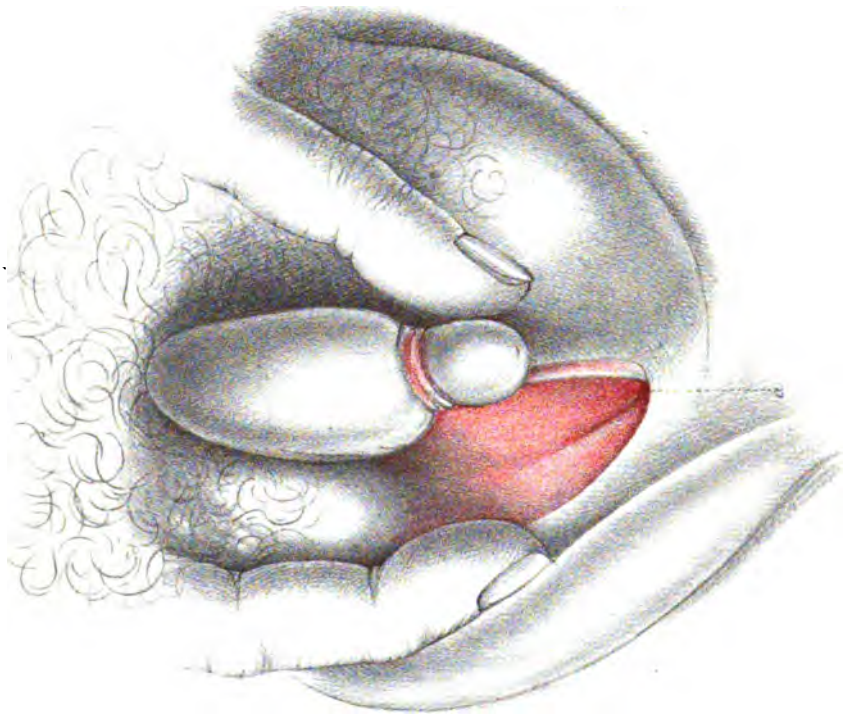
By H. Cooper Rose, M.D.

This apparently androgynous creature came under my notice in the year 1870. At that date he was ten years old, rather diminutive in size, and possessing features resembling those of a little girl.

On examining the parts of generation I found in the normal situation of the clitoris an erectile organ about an inch long, possessing a prepuce not covering the glans, and having no urethra, although there was a slight depression indicating where the meatus should be. This small penis was rather loosely bound down by a fold of mucous membrane which prevented it being raised beyond a line at a right angle to the body. The scrotum was divided into two equal lateral portions by a deep fissure, at the lowest point of which there existed a *cul-de-sac*



Dr Westmacott del.



W. West & Co. lith.

about half an inch deep precisely resembling the entrance of the vagina, being lined by delicate mucous membrane. At the bottom of this *cul-de-sac* was the meatus urinarius. The appearance of the parts, therefore, at that period were exactly those of a female child possessing an unusually large clitoris.

While the child was lying down no testes could be felt in the parts resembling the labia, but on assuming the erect posture a very small testicle could be recognised on each side; these were retracted within the abdomen immediately he resumed the horizontal position.

At that period I opined it to be a case of hypospadias, and, although the child had been baptised and brought up as a girl, that it was really a boy.

The case was subsequently seen by the late Mr. Campbell de Morgan, and recently by Mr. Gay, who both concurred in the opinion I had given.

I was unwilling, however, to advise his removal from the school; 1st, because no harm could arise from his remaining while so young; 2ndly, because I was anxious to watch the development of the case; and, 3rdly, because his removal would have deprived him of the advantages of the charity. Nevertheless I deemed it prudent to direct that he should always sleep in the ward with the little children, and generally that he should be carefully supervised.

During the six years the case has been under my observation no change except in size has taken place. The testes no longer pass into the abdomen, but still the parts present much the appearance of those of a female with an enlarged clitoris. The form of the pelvis is masculine, the voice is rather deep, and there is no development whatever of the mammæ, although the child is now nearly sixteen years of age.

On examining the penis I find the glans small, and the corpus spongiosum almost entirely deficient near the root. The slightest irritation produces a firm erection.

Dr. Westmacott has most faithfully depicted in the

drawings which I exhibit the appearances of the parts as they now present themselves. The meatus urinarius is shown at the point *a*.

In the 'Journal Univ. Hebdom. de Médecine,' tom. x, a very remarkable case is published in which there was apparently a penis without scrotum or testes, possessing a normal urethra which communicated at its proximate extremity with a vagina and uterus, ovaries, &c., which had no other outlet than the urethra. I am indebted to Dr. Westmacott for a reference to this case as well as for the original drawings relating to it which he has kindly permitted me to exhibit.

A certain tradesman in Paris about fifty years of age, and who was a *widower*, died rapidly from an attack of cholera in the year 1832. Nothing was known during his life of the singular malformation above described which his death revealed. Dr. Westmacott, however, fortunately had an opportunity of making a post-mortem examination, and the carefully executed drawings of the parts are now exhibited.

CASE OF FALLOPIAN PREGNANCY. RUPTURE AND DEATH ABOUT FIFTH MONTH.

Dr. Meadows exhibited for Mr. Moore, of Moreton Marsh, a specimen of extra-uterine fœtation of the tubal variety, which had burst between the fourth and fifth month, the patient dying in about fifty hours. Dr. Meadows referred to one point of interest in the case, viz. a peculiar malformation of the Fallopian tube of the affected side which joined the uterus at some distance from the fundus, and seemed to have been the cause of the abnormal gestation by causing an obstruction to the passage of the ovum

along the oviduct. He had observed the same thing in other cases.

The case as described by Mr. Moore was as follows:

Annie H—, æt. 28, married October, 24th 1872, the mother of three children, the eldest, first child, was born three days after marriage and lived three weeks only, the second child was born February 14th, 1874, and is living now; the third child was born February 21st, 1876, and that child lived only a few minutes after birth.

On October 5th (Thursday, 1876), whilst at work, she was seized with a sudden pain in her side and great faintness. On being seen by a medical man soon after, she was found to be suffering from symptoms of severe shock, pulse feeble (in fact, almost imperceptible), face pallid, expressive of great pain, being pinched and deathly in appearance; she had pain in her chest and a feeling of constriction; the respiration being frequent and sighing. She also complains of an intense pain in her bowels about the middle of abdomen, which pain was much increased on making the slightest movement. She lay, in fact, with her knees drawn up and on her left side, and begged that she might not be moved; she complained of feeling sick, but had not strength to vomit; she remained much in the same condition until October 7th (Friday), only weaker, and at 3 p.m. that day, whilst having a bed-pan arranged for her, she died suddenly. She was conscious up to the time of her death, and was not particularly restless; she never recovered at all from the shock although brandy, ammonia, and opium were given her, together with milk and beef tea. She lived fifty-two hours after she was first stricken from time of seizure to death.

The history during this last unfortunate pregnancy is simply this, that she complained at times more or less of a pain in her side, hurting her worse on taking a deep breath. She, however, did her household work as usual, and went out as charwoman twice a week. She was of cheerful disposition and had no idea that there was anything wrong in her condition, or at least she never hinted

at anything of the sort; the day before she was seized she had been doing more than usual in the way of walking, and as it rained she had been obliged to hurry; she was at work in her house when she failed; she had noticed the fœtal movements for some little time.

The post mortem revealed the extra-uterine pregnancy; there was an immense clot of blood lying over the peritoneum, which unfortunately was not weighed; all the organs were healthy but very pale; the spleen was hard and contracted.

The increase in size of abdomen did not appear to differ from that of ordinary pregnancy, nor was the pain referred to exactly one place.

N.B. The above is an imperfect history of the case. I did not, however, see the woman before her attack on the 25th, and her relations are all very ignorant and stupid, but what is stated is substantially correct.

The PRESIDENT thought the specimen nearer the fourth than the fifth month.

Dr. BRAXTON HICKS suggested that an extra-uterine fœtus was generally below the normal standard.

Dr. HAYES thought a committee should be appointed to report upon it.

CASE OF EXTRA-UTERINE GESTATION; REMOVAL OF LIVING FŒTUS BY ABDOMINAL SECTION; RECOVERY OF BOTH MOTHER AND CHILD.

By Mr. Jessop.

I am indebted to my friend Dr. Wiltshire, your able Secretary, for an opportunity of relating to you the facts of a case of extra-uterine pregnancy, in which, by the operation of abdominal section, the lives of both mother and infant were preserved. I have gladly accepted Dr. Wiltshire's invitation to be present at your meeting to-night, because I feel certain that in the Fellows of the London Obstetrical Society I shall find an audience at once the most appreciative and the most indulgent. I shall not presume, in such a place, to do much more than merely recite my case. As a surgeon whose knowledge of obstetrics is limited by the want of experience, I shall confine the few remarks I have to make to the purely surgical aspects of the case, and shall purposely avoid any general consideration of the subject of extra-uterine gestation; though I am not without the hope that gentlemen more competent than myself may be tempted to enlighten us upon some, at least, of the many important problems which can hardly fail to be suggested. My case, then, is as follows:

Mary C—, a married woman, æt. 26, residing in Leeds, had enjoyed fair average health up to the time of the commencement of the illness with which we are now concerned. In March, 1869, she gave birth to an only child, after a labour in all respects natural. After having weaned the child she continued to menstruate with moderate regularity up to December, 1874.

During Christmas week of that year the catamenia were present, and as January passed over without a recurrence

of a "period," she believed herself to be "in the family way." There was no other symptom of pregnancy.

Mrs. C— was accustomed to supplement her husband's earnings—which for years, from the slackness of the cloth trade in Leeds, had been miserably low—by the proceeds of charing. It was about the 3rd of March, 1875, when she believed herself to be rather more than two months pregnant, that in lifting a heavy washing machine she experienced a wrench in the right side of her body. This was followed during the ensuing week by severe abdominal pains and a little feeling of sickness; but in spite of these, and although at times she was compelled to walk "double fold," she continued to attend to her duties.

On the 10th of March, shortly after commencing to wash, she had occasion to go to the water-closet, and whilst there—but not in consequence of any effort or straining—she was suddenly seized with a violent pain in the right side of the belly, which caused her to swoon away. She was immediately carried to bed, and Mr. Clayton, her ordinary medical attendant, was sent for. As the symptoms presented were those of inflammation, viz. pain, swelling of the abdomen, vomiting, constipation, retention of urine, and fever, she was treated accordingly. For two months she was confined for the most part to bed, suffering constantly from abdominal pain, sickness, and loss of appetite.

On the 14th of May she became conscious, for the first time, of the movements of a child; and at about the same time she observed a hard swelling in the lower part of her body, towards the right side.

On the 18th she obtained admission into the Cookridge Convalescent Hospital, near Leeds; but she returned home after eight days because her suffering compelled her to lie in bed longer than was permitted by the rules of the institution. From this time forward she continued to suffer from constant abdominal pains, frequent sickness, constipation, and want of appetite. Her pains were, throughout, aggravated by every movement of the child; and she was in perpetual dread of any such movement.

On three or four different occasions a discharge of blood from the vagina took place, extending, once, over a day and a night. Her flesh and strength rapidly wasted. From time to time the attacks of pain and vomiting became more violent; and when, at length, it was evident that her life was becoming endangered, Mr. Clayton—who for some time past had formed the opinion that the child was lying outside the uterus—sought the advice of Mr. Samuel Hey. These gentlemen made a careful examination of the case together on the 13th of August. They satisfied themselves of the existence of an extra-uterine living fœtus, and gave it as their opinion that an operation for its removal was called for. Seeing that it was my week for admitting patients at the Infirmary, Mr. Hey called upon me, and asked me to undertake the treatment. She was accordingly admitted into my ward that same evening, the 13th of August, 1875. I found her looking emaciated and pain-worn, vomiting after everything swallowed, constipated, feverish, with a dry tongue, great thirst, and a rapid feeble pulse. It was abundantly evident that the patient was fast sinking. At 11 p.m. a consultation of the whole surgical staff was held, at which the following observations were made:—The abdomen was throughout distended. At the umbilicus and below was a large rounded prominence, which gradually sloped off towards the ensiform cartilage, and terminated inferiorly somewhat abruptly in a hollow, which was bounded again by a lesser prominence immediately above the pubes. On a closer examination the umbilical prominence presented the characters of a child's breech; the cleft and the two buttocks were distinctly traceable through the thin abdominal walls, and extending upwards in a straight line towards the sternum the little prominences of the vertebral spinous processes were plainly perceptible. Above the pubes two feet could be made out, and above the umbilicus, immediately below the ribs, it was not difficult to map out the outlines of the two scapulæ. The rapid beating of the fœtal heart could be most distinctly heard

towards the right side above the umbilicus. The breasts were enlarged and the areolæ were fairly developed.

On examination per vaginam the uterus felt somewhat enlarged; and on measurement by Simpson's sound its cavity was found to be 2¼ inches in length. The uterus remained motionless, whilst the abdominal contents were swayed from side to side. On several occasions the movements of the child were plainly visible, and indicated considerable vigour. After repeated careful search we were unable to satisfy ourselves of the presence of a placental souffle. The diagnosis of extra-uterine gestation seemed complete. The woman's condition was becoming extremely critical. Under these circumstances it was decided to remove the child by abdominal section. With the full concurrence of my colleagues I accordingly proceeded to perform the operation at 12.30 on the morning of the 14th of August.

The patient having been placed under the influence of ether, and the bladder emptied of urine, an incision six inches long was made through the linea alba, with the umbilicus at its centre. The abdominal wall was unusually thin, but more vascular than common; and the peritoneal lining, though natural on its free surface, appeared thick and velvety on section. Immediately upon the completion of the incision the breech and back of the child, thickly coated with vernix caseosa, came directly into view. At the upper part of the wound the omentum was seen lying like a cape upon the child's shoulders, and inferiorly the funis, of natural appearance, passed transversely across the wound and was traced round the external aspect of the left thigh of the fœtus to its attachment at the umbilicus. The child was in a kneeling position, its breech presenting towards the mother's navel; its head, folded upon its chest, buried beneath the omentum and transverse colon; the soles of its feet pointing towards the pubes; and its knees resting upon the posterior brim of the pelvis. . . . Its removal was readily effected. The funis was tied and separated in the usual manner, and the

child was handed over to the custody of two gentlemen previously appointed to look after its wellbeing. . . . It was now seen that the gestation had been of the "abdominal" variety; no trace of cyst or of membrane

could be found. The child had lodged in the midst of the bowels, free in the cavity of the abdomen. A few bands of unorganized lymph of a very friable nature lying upon but not adherent to intestines were readily removed by sponging, and about an ounce of a clear serum was found in the peritoneal cavity. On tracing the umbilical cord,[1]

[1] In the engraving the umbilical cord is represented as passing round the right thigh; it should be, as stated in the text, coiling round the left thigh.

the placenta, having a larger superficial area than natural, was seen covering the inlet of the pelvis, like the lid of a pot, and extending some distance posteriorly above the brim, where it apparently had an attachment to the large bowel and posterior abdominal wall. Near its centre was a round prominence which seemed to correspond with the swollen fundus of the uterus beneath. Great and especial care was taken not to cause the smallest disturbance to its connections. The placenta was, indeed, left *untouched*. The umbilical cord was now brought out of the wound, and shortened so as to leave its cut end protruding about two inches beyond the surface of the abdomen, where it was secured at the inferior extremity of the wound by means of a clamp which has been invented by the ingenious chaplain to our infirmary, Mr. Gough, for the treatment of the pedicle in ovariotomy. The wound was now closed by means of six silver wire sutures passed through the entire thickness of the abdominal wall and including the peritoneum, together with as many intermediate superficial sutures of silk. It was now observed that the prominence above the pubes before alluded to was due to the placenta covering the enlarged uterus. Straps of plaster, pads of lint, and a roller completed the dressings. . . The child, a female, was well developed, considering that in all probability it had not reached the eighth month of fœtal life. For a considerable period of time, from an hour to an hour and a half, there was much uncertainty as to its survival, owing to very defective respiration. Perhaps this might have been due, as was suggested at the time by Mr. Hey, to its having become etherised or in other manner narcotised through the medium of the mother's blood. At length, through the skilful management of Mr. Hey and Mr. Scattergood, healthy breathing became established, and the immediate danger to the child's life was averted. In the course of a day or two a wet nurse was procured for it, and afterwards its progress became most satisfactory.

I will not run the risk of wearying you by a recital from

my note-book of the mother's condition from day to day. The further history of the case shall be dealt with briefly.

For the first four days it was deemed prudent to keep the patient upon the table in the operation room, lest her removal should prove prejudicial. Afterwards she was placed in a private ward. Morphia was injected subcutaneously, at first freely and frequently, subsequently at longer intervals; and on the 26th of September, six weeks after the operation, it was finally abandoned. . . . During the first two days nothing was given by the mouth but a little ice. On the day after the operation nutrient injections were commenced, and they were continued for about four weeks, being given at first once in four hours, and subsequently at increasingly long intervals.

On the morning of the 16th of August a little flatus, and on the 18th some fæces passed from the bowels. From the time of the operation the vomiting gradually lessened in frequency and in severity; and by the 17th of August it had ceased to follow upon each act of swallowing, and had become an occasional symptom only.

On the 17th, too, the clamp was removed, and the funis, in a gangrenous state, could be traced deeply through the wound. To prevent it from dropping into the abdomen, it was secured outside by means of *jute* and adhesive plaster. From time to time she complained, when not under the influence of morphia, of very great pain at the bottom of the body and in the thighs. There was not at any time a discharge from the vagina, although she made complaint of pain and forcing as if due to uterine contraction.

On the 18th her breasts became distended with milk; and by the 22nd it had disappeared again. Besides the nutrient enemas, she now began to take a few spoonfuls of milk and gruel by the mouth.

On the 19th, five days after the operation, the dressings were found soaked with a bloody discharge. This continued daily for some time in quantities varying from one or two to as much as eight or ten ounces.

On the 22nd the discharge was observed to be offensive and of a thick dark grumous character; and a few days later the stench arising from it was most intense.

On the 24th she had a severe rigor lasting ten minutes, and this was followed by vomiting.

On the 29th the vomiting had ceased, and her general condition had so far improved that her request to have tea and a biscuit was complied with. From this time her diet was improved daily; fish, eggs, chicken, &c., being cautiously added at intervals.

On September 4th the funis was cast off as a long slender slough, its discharge being followed by a copious flow (six or eight ounces) of fluid. The wound had now healed in its entire length, with the exception of the round hole at its lower extremity which had previously been occupied by the umbilical cord. At this time three weeks had elapsed since the operation. During the next fortnight the discharge was most profuse. Two, three, and even four times in the twenty-four hours she was seized with agonising abdominal pain, which after lasting from a few minutes to two or three hours, was at once relieved by an outpouring of a quantity of putrescent fluid.

On the 10th I stood by her in one of her most severe attacks, and I was almost alarmed, upon hearing her exclaim "There, I shall get relief," to see not less than half a pint of a coffee-coloured fluid of the consistency of treacle and unbearably offensive rapidly forced out of the wound.

On the 14th she complained of pain in the right leg and foot, and upon examination these were found to be slightly œdematous. There was also some tenderness along the course of the femoral vein in Scarpa's triangle.

On the 15th a slough three inches long came away.

On the 16th the discharge became purulent and decidedly less in quantity. It was observed that the suprapubic prominence had now disappeared.

By the 18th the œdema in the leg had gone; and on the 19th the patient sat up in bed to dinner. Her progress now became steady and equable.

On the 27th she sat for an hour in a chair; and on the 9h of October she was able to be transferred to the general ward. The discharge had now become small in quantity, thin and serous in character.

On the 29th of October the wound is reported as quite healed; and three weeks later she returned to her home. From that time to the present she has kept in good health. Menstruation commenced about a month after she left the infirmary, and has recurred at regular periods ever since. The child was as healthy, vigorous, and large as an average child born in the natural way; and it continued to thrive well until July, 1876, when after a week's illness it died of croup and inflammation of the lungs at the age of eleven months.

As I announced at the outset, I have no intention of dealing with the subject of extra-uterine conception as a whole. It would be impossible, indeed, to do so in a single paper of limited length. . . . Campbell, Ramsbotham, Hutchinson, and others have written as exhaustively as the recorded material at their command will permit; and it would be a fruitless task were I to attempt to go over the same ground. Our knowledge of the natural history of these cases has, in a great measure at least, become fixed and well defined. It is true that we have, as yet, much to learn respecting their causation and exact mode of origin; but when once the impregnated ovum has been prevented from leaving its ovarian bed at the appointed time; or where it has tripped, as it were, in its escape, and tumbled outside the grasp of the fimbriated end of the Fallopian tube; or when, again, it has been arrested in its onward progress towards the uterus, there is not a stage in its further development or decay which has not been many times observed, and with more or less accuracy described. Upon these—causation, mode of origin, progress of development, natural terminations —I do not propose to enter. The practical points, the questions more especially interesting to me as a surgeon, which seem to present themselves most prominently upon

a review of the particular case before us are—1st, what are the circumstances which induced my colleagues and myself to decide upon the removal of a living extra-uterine fœtus? and, 2ndly, what precautions or means did we make use of which may fairly be said to have conduced to our patient's recovery?

With regard to the first question it is almost needless for me to say that hitherto the teaching of our most eminent obstetricians and surgeons has been entirely opposed to operative interference during the life of the child, and this teaching has been founded upon the almost universally fatal character of operations performed under these circumstances. Dr. Wiltshire informs me that he has sought out a few recorded instances of recovery in foreign lands; but I believe I am correct in stating that the case I have just read is the first example in this country in which the lives of both mother and child have been preserved. Campbell in his monograph, which forms the basis of most subsequent writings upon this subject, says: "Of nine *women* operated on during the existence of fœtal life or soon after its extinction, the *whole died.*" And again: "By fifty-one operations only *two children* were preserved, and in one of these even the details are too marvellous for belief." . . . Dr. Ramsbotham in his 'Obstetric Medicine and Surgery,' 5th edition, published in 1867, writes: "*One* case is recorded in which both mother and infant were saved," and he refers for confirmation to the 'New York Medical Repository;' and further he says: "The result of the cases on record, in which attempts were made to save the child's life by operation, would teach that such a proceeding is almost always fatal to the mother, and should therefore not be entertained." In the face of such overwhelming evidence as this, and of a rule so naturally and unhesitatingly deduced by a gentleman of Dr. Ramsbotham's weight and authority, I cannot but feel that it lies upon me to show on what grounds I ventured to run so directly counter to their teaching. . . . I have long since come to

regard the exceptions to a rule as sometimes of more importance than the rule itself, and there is frequently much more to be learned from an exceptional than from a typical example. It may be—possibly it may hereafter *still* be found to be—better and safer practice *not* to interfere, than to attempt the removal of a living extra-uterine fœtus, at least under ordinary circumstances and in the majority of instances. Nevertheless, as in this case, exceptional conditions will sometimes arise which can only be dealt with by a deviation from the prescribed rules. . . The life of the mother had been gradually ebbing away for weeks, probably for months. At the time of Mr. Hey's first visit to her it was evident that her condition was rapidly changing for the worse. On her arrival at the infirmary we were all agreed that she had not many days, perhaps not many hours, to live. There could be no doubt, on the other hand, that the child was not only alive, but that it showed signs of vigour and of strength. The mother's critical condition seemed to have been brought about by the continued vomiting and the frequent attacks of pain, both of which were probably due to the presence of the fœtus in her abdomen. *Her* only possible chance lay in the removal of the child; and as to the child itself there was no *apparent* reason why its life might not be preserved. Under these circumstances we deemed ourselves justified in undertaking the operation; *justified*, I repeat, because it offered the only small chance of saving the mother, and justified again by the fairer prospects of preserving the infant.

And now, lastly, was there anything in the line of treatment adopted which may be said to have contributed in any degree to the successful issue? Putting aside the very critical condition to which the woman was reduced at the time of operation—and I am not quite sure that this even ought to be reckoned as weighing against the chances of recovery—it would be difficult to conceive a case of extra-uterine pregnancy presenting fewer difficulties or more free from dangerous complications. The peritoneum

was in a fairly healthy condition, and contained nothing more than a few albuminous shreds and a small quantity of a clear liquid. There were no membranes, no adhesions, no enclosing capsule for the child. There was no bleeding to staunch; and the abdominal organs were but little disturbed. These facts must be kept well in mind when estimating the dangers in any future case. Nevertheless two points in the treatment do seem to me to be specially worthy of mention, viz. the care which was taken not to interfere in the slightest degree with the placenta, and the provision which was made for securing its escape from the abdomen after its separation from the maternal structures. Nothing need be said as to the former of these two precautions, except that the result in this case confirms the wisdom of those who have so strongly insisted upon its importance. Unless the placenta can be removed without the risk of setting up a copious bleeding, it had better be left absolutely undisturbed. But what is to become of it? The placenta formed in this case, as it must in most, by far the largest item in the sum of dangers to be encountered. Experience has shown that a separation from the maternal structures will take place, and that this period of separation must be reckoned as one of the most fatal. Besides the risk of hæmorrhage, there are others not less grave—peritonitis, septicæmia. All these dangers are diminished by securing an uninterrupted outlet for the detached placenta, and such discharges as may accompany its separation. The means made use of, after careful consideration, consisted in keeping the inferior end of the abdominal wound open by means of the umbilical cord, left attached to the placenta. Through this opening the disintegrated tissues and offensive fluids found ready egress, and thus were prevented from spreading damage around. Upon looking back, no device has ever suggested itself to my mind better calculated to secure the end which in this case was happily attained; and I think now, as I did at the time, that to our management of the placenta may be fairly ascribed a large share of whatever credit we may claim in bringing about a successful issue.

The PRESIDENT said the Society was much indebted to Mr. Jessop for bringing so interesting a case before it that evening, and for the trouble he had taken in coming from Leeds to be present at the meeting. Although a few similar cases had been reported from abroad, so far as his knowledge went this was the first recorded instance of extra-uterine fœtation in Great Britain where both mother and child had been saved by abdominal section. In that respect it was unique. There could be no doubt that the operation had been indicated in this special case because the woman was at the moment in imminent peril of her life, and the success which followed showed that the proper time had been chosen for operating. Notwithstanding the good result in Mr. Jessop's case, it must not be taken as furnishing a precedent and justification for abdominal section in other cases of extra-uterine fœtation, where, although pregnancy might be far advanced, yet the symptoms were less urgent. In a certain proportion of these instances the child died, became encysted, and was converted into an inert mass, which gradually diminished in size, and did not imperil the life nor eventually seriously interfere with the comfort of the mother. In other instances, it was true, suppuration was set up after the death of the child, and grave symptoms called for some intervention on the part of the surgeon; but, even here, the recorded results proved that the dangers of operating were greatly diminished by interfering at a later period when the fœtus was dead and suppuration was established, instead of operating when the child was still alive. Of nine cases recorded by Campbell of abdominal sections during the persistence of fœtal life, all the women died; while of thirty operated upon after the suppurative process had set in, twenty-eight recovered. The dangers of operating during the life of the child were probably in part due to the presence of that puerperal state which had been so fully discussed in the previous session. This happy result in Mr. Jessop's case must, no doubt, be attributed, in some sort at least, to the leaving intact the attachments of the placenta, and thus lessening the extent of open wound exposed in the structures of the pelvis.

Dr. MEADOWS congratulated Mr. Jessop on the success which had attended his brilliant operation, and reminded the Society that some years ago he had advocated the very practice which this case now so triumphantly vindicated. Contrary to what had just been recommended by the President, he thought that where it was evident that not only a living but a viable child existed in the abdomen of its mother, it was our bounden duty to interfere and rescue the child from its perilous position, for by so doing we should also be doing our best to avert a catastrophe which threatened the life of the mother. He was well aware that an appeal to statistics in which this operation had been performed

in former times seemed dead against such practice, but it should be remembered that their almost uniformly fatal character was clearly traceable to the forcible removal of the placenta, which gave rise to most alarming and generally fatal hæmorrhage. He had now learnt, however, that this interference is wholly unnecessary, that the placenta should be left to take care of itself, and either it would come away by a slow disintegrating process, or, as he had suggested some time ago, the cord might, perhaps, be tied and cut off close, the abdominal wound being at once closed. At any rate, Mr. Jessop's case would, he hoped, be the starting-point of a new practice, and that henceforward every obstetrician would feel that he had not done his duty if under similar circumstances he stood by without making an attempt to deliver as in this case. He went further, and expressed the hope that it would some day be regarded as sound practice in all cases where tubular pregnancy existed to open the abdomen and treat the case as we would an ordinary ovarian tumour, viz. by removal of the tumour formed by the misplaced gestation, making a pedicle of the proximal end of the Fallopian tube. The results of such treatment could hardly be more disastrous than the rupture of the cyst, and he believed that very many such cases might be saved.

Dr. Snow Beck remarked that the Fallopian tube was perfectly open to the passage of a small probe in the specimen Dr. Meadows had brought forward this evening.

Dr. Wynn Williams observed that the tube passed through the muscular tissue obliquely.

Mr. Spencer Wells asked for further details as to the provision for the escape of fluid from the peritoneal cavity after the operation. From the report read it would seem that so long as the funis, passing out from its placental attachment, kept a free channel between the two sides of the opening in the abdominal wall, the patient did well; but, as soon as the funis came away, there were intervals of accumulating fluid, at times very fetid, with great pain and feverish attacks, followed by gushes of pent-up discharge and relief, until a fresh accumulation took place. Perhaps this might have been avoided by the use of a drainage tube of glass, vulcanite, or india rubber, and the use of a syringe with some disinfecting fluid, as carbolic acid or iodine. It was by attention to such details in after treatment, as well as to improved methods of operating, that we might hope for very much better results now and hereafter than had previously followed gastrotomy in cases of extra-uterine fœtation.

Dr. Cleveland inquired if he had understood Mr. Jessop correctly in stating that the patient had been sustained for a month by nutrient enemata. He thought it would be interesting to know the exact formula employed. He believed that in

critical cases, where it was most desirable not to offend the stomach, nutrient enemata might be more successfully resorted to than they have hitherto been.

Dr. Braxton Hicks thought we should distinguish between this, an exceptional case, and those where the sac was ruptured and the cyst entire. The treatment was totally different where there was an amniotic sac; this should be stitched to the peritoneum, and the abdominal wound left open. Had the funis in this instance been cut off and the wound closed, the placenta would probably have shrivelled up.

Dr. James Edmunds mentioned an unpublished case of Cæsarean section which had occurred some years before in the practice of an eminent surgical friend, and in which the placenta had been left in the uterus on account of a firm adhesion. The patient recovered. As to the case of Cæsarean section recently under his own care, and to which Dr. Rogers had referred as having so perfectly recovered, he might, perhaps, add that in a previous case of Cæsarean section, of which a report appeared in the 'Lancet' of January 5th, 1861, where also both mother and child happened to recover, he had used no sutures to the uterus, the uterine wound in that case closing up very perfectly. His recent case, again, he had treated exactly as that of sixteen years ago, not only in regard to leaving the uterus without sutures, but in all other points. He had attached considerable importance to the administration before the operation as an hæmostatic and to the use of ergot so soon as the child was extracted from the uterus. In the recent case the uterus had been cut "upon the cross," and the wound gaped greatly, and the uterus almost seemed as if it would turn inside out under the action of the after-pains, and he had felt that if in any case sutures were demanded the last case was one in which they ought to have been put. Still, notwithstanding the earnest advice of his friend Dr. Routh, to whom he had been much indebted for advice and help in the operation, he had been unable to overcome his repugnance to suturing a muscular organ such as the uterus. As far as his judgment went it was now settled against suturing the uterus in any future case whatever. There had been several considerable gushes of blood from the uterine cavity, but the abdomen was kept open nearly an hour, and the uterus manipulated carefully with the fingers until it became thoroughly and uniformly contracted. No blood appeared to have afterwards escaped into the abdomen, the opening into which had all sealed up by first intention. The patient had recovered without a single drawback, and with her child left the hospital perfectly well on the twenty-third day.

Dr. Edis called attention to the statistics collected by Dr. Parry, of Philadelphia, in his recent valuable monograph on

Extra-Uterine Pregnancy. He showed that in 500 cases 248 women went to or beyond term. Of these 122 lived and 125 died, giving a mortality of 50·4 per cent. Of 60 cases operated on 34 lived and 26 died, giving a mortality of 43·33 per cent. Of 188 cases reaching or passing beyond term and left to nature, 88 lived and 99 died, giving a mortality of 52·65 per cent., whilst of 62 gastrotomies for the removal of extra-uterine children during or at the end of gestation 30 lived and 32 died, a mortality of 51·61 per cent., only 1 per cent. in favour of gastrotomy. Dr. Edis thought that the time had come when we should reconsider the subject and not be wholly influenced by the mere statistics of preceding operations, more especially when we considered the great advancement that had taken place in the diagnosis of these obscure cases, and the improved methods of dealing with the placenta and the after-treatment generally. In a certain number of cases extraction *per vaginam* without opening the peritoneal cavity at all could be resorted to, and the risk of life thus materially lessened.

Dr. PALFREY thought we were tied down by the tradition of our old teachers. In his own experience he had formerly been uniformly unsuccessful. The cases died from two causes: some were poisoned by opium, and others from too much stimulant. He considered it the duty of every man to operate for extra-uterine fœtation as soon as it had been clearly ascertained. The patient's life was in peril, and we were bound to rescue her from that peril if possible. He regarded the statistics of our forefathers as valueless in guiding us in the present day.

Dr. AVELING thought the position of the child in the abdominal cavity a subject of great interest. Floating freely as it did when alive without the retaining influence of the uterus he expected to find the head carried by its greater weight towards the pelvis. The opposite, however, was the case. This might be accounted for by the recumbent posture which the woman had been obliged to maintain, and by the altered shape of the abdominal cavity caused by the filling up of the pelvis by the enlarged uterus and the placenta. The case being so unusual offered a good opportunity of testing the relative value of the gravitating and reflex theories of fœtal position near the end of pregnancy.

Dr. WILTSHIRE thought Mr. Jessop ought to be congratulated on the success of his case; this being the first case in the literature of the English language where both mother and child had been saved. Keller, of Strasburg, had related nine cases in which four of the mothers recovered and seven children, one being a case of twins. The diagnosis of these cases was very difficult, especially in the early months. In cases of Fallopian gestation rupture was liable to occur about the second month, when the cases were regarded as pelvic hæmatocele or cellulitis, there being

a mass detected on one or other side of the pelvis, and the uterus enlarged. In the later months, even if fœtal movements were very distinct, it was not necessarily one of extra-uterine gestation. A case occurred in Paris, where every one who examined it thought it to be extra-uterine, but the head presented, and the child was delivered naturally. In peritoneal cases we ought to operate, leaving the placenta untouched, and allowing a free passage for the *débris*.

Dr. WYNN WILLIAMS alluded to the case of Dr. Greenhalgh, where it was diagnosed very early, and the liquor amnii aspirated.

Mr. JESSOP replied as follows:—I need hardly say, sir, how highly gratified I feel with the reception which you yourself and the Fellows of the Society have accorded to me this evening. My thanks are especially due to you, sir, and to my friend Dr. Wiltshire for the very complimentary manner in which you have spoken of me. Much of what has been said upon the subject of my paper I accept with the respect which is due to gentlemen who like yourself, Dr. Braxton Hicks, Mr. Spencer Wells, Dr. Alfred Meadows, Dr. Wiltshire, Dr. Edis, and others have attained a position entitling them to speak with something like authority. A question was asked as to whether in the first instance, and for how long, I relied upon nutrient injections. For the first day or two nothing was given by the mouth but a little ice, our reliance for support being wholly placed in absorption by the rectum. But after the first two days a little fluid food was by degrees introduced into the stomach, as the tendency to vomit was observed gradually to lessen. Dr. Braxton Hicks and Mr. Spencer Wells desire to know why a drainage tube was not introduced by the side of the umbilical cord, the latter remarking that by its use much of the woman's subsequent sufferings might have been averted. My answer is, that at the time of the operation I was in the dark as to what would become of the placenta. It might, for aught I knew, remain attached to the pelvic tissues, and become one with them, or it might atrophy and dwindle rather than break down, dissolve, and come away as it did in the form of a putrescent fluid, in either of which cases the drainage tube would have been useless; nay, worse, would have been an additional foreign body, and therefore an additional element of danger. The umbilical cord served well as a drainage tube. I knew it must die, and I rightly thought that it would serve to form a channel through which the disintegrated placenta might find an escape. Before I sit down let me again, sir, thank you and all the Fellows present for the courtesy I have received at your hands.

DECEMBER 6TH, 1876.

WILLIAM O. PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

Present—88 Fellows and 31 visitors.

Books were presented by Dr. H. W. Acland, Dr. L. D. Bulkley, Dr. Jas. R. Chadwick, Dr. F. C. Faye, Dr. Wm. Goodell, Dr. Geo. Johnston, Dr. Gaillard Thomas, Dr. A. Wasseige, the Royal Medical and Chirurgical Society, the Clinical Society, and the Philadelphia Obstetrical Society.

The following gentlemen were admitted Fellows of the Society:—Frank Argles, L.R.C.P. Ed. (Wanstead), Ernest R. G. Groth, M.D., J. Sinclair Holden, M.D. (Sudbury), James Newham, M.R.C.S., P. Kirkpatrick Picard, M.D., Flaxman Spurrell, L.R.C.P. Ed., William Edward Stewart, M.R.C.S., and Henry Thornton Wharton, M.A., M.R.C.S.

The following gentlemen were elected Fellows:—Gomer Davies, L.R.C.P. Ed., Wm. Henry Maberly, M.B., Dawson Nesbitt, M.D., Charles Oakes, M.B., C.M. (Leamington), H. Campbell Pope, M.B., and Woldemar Snegiereff, M.D. (Moscow).

The following gentlemen were proposed for election:—Thomas Edward Bowkett, M.R.C.S., Peter L. Burchell, M.B., Douglas W. Giffard, M.R.C.S. (Brighton), Charles Godson, F.R.C.S. (Barnet), Gerald S. Harper, M.R.C.S.,

Charles Fred. Knight, M.R.C.S., Paul R. Osterloh, M.D. (Dresden), S. Wordsworth Poole, M.D. (Sidcup), and Charles Tozer Savory, M.D.

TWO CASES OF IDIOCY.

Dr. WILTSHIRE exhibited two children who were idiotic. In both cases the labour had been very prolonged, and was apparently the cause of the mental defect. No hereditary tendency was traceable.

ON THE TRANSFUSION OF BLOOD.

By Dr. ROUSSEL, of Geneva.

IN England the idea of blood-transfusion presented itself to the minds of scientific men as soon as W. Harvey had discovered the circulation of the blood in 1630. Already in 1665 Christopher Wren, Richard Lower, and Robert Boyle were engaged in researches on the transfusion of blood from animals to the human subject, at the University of Oxford. Edmund King and Thomas Cox made use of it in 1667. Harwood at Cambridge, and Russell at Suffolk, and lastly Darwin in 1796, also availed themselves of it. But the defective methods employed by these scientific observers did not give such happy results as they expected of them.

In 1818 the question was again attacked throughout

the country, and Blundell made a long series of experiments on dogs, followed by *nine* transfusions in man, which gave the satisfactory results of *six* cures in desperate cases.

Waller, Doubleday, Uruling, Irwell, Boyle, Douglas Fox, Dawes, Rilian, Banner, Ingleby, May, Greaves, Wheatcroft, Higginson, Simpson, Lower, and Bryant at Guy's Hospital; Braxton Hicks, Thorne, at St. Bartholomew's Hospital; Greenlock, Greenhole, Turner, Wills, Playfair, Aveling, have all practised transfusion, with an amount of success which is the more remarkable when we come to consider the imperfect nature of their appliances.

Blood transfusion is really a rational physiological operation, useful in its real indications, and which can if accomplished scientifically produce always the results which can be scientifically demanded of it; but the operation must be well performed, and one must not expect from it impossibilities.

Very rarely has the operation been performed under favorable conditions: hence it has lately been decried in unmeasured terms by Lamartiniére. If it has given bad results, and disappointed many practitioners, the blame rests on the fact that it has always been (in these cases) executed without regard to the conditions which are imperiously demanded; and which had been either misunderstood or were unknown.

By the word *transfusion* we must not understand the injection of the residues of defibrinated blood, of artificial serums, of milk, or of albuminised water; these are not true blood transfusions; and in the same defective category may be placed injections made by means of apparatus constructed of metal, of glass, of vulcanised india rubber, or of blood altered in its properties by a greater or lesser exposure to the air, after removal from its natural vessels—circumstances which inevitably induce either coagulation or the production of embolus.

To transfuse blood can only mean to conduct without interruption and without contact with modifying agents,

the living and entire (unaltered) blood, from one organism to another, so that it can produce all those vital effects which constitute the real task (*rôle*) of the blood. And to this end a transfusing apparatus should only be a direct "anastomose" from one vascular system to another.

The "anastomose" ought to be an active motor, an artificial heart; since for prudence sake it should only be applied to the veins, which can be opened without danger, but in which the blood has no power of impulsion. This artificial heart should have a known capacity which may serve to measure the quantity and regulate the speed of the blood transfused; and at the same time it should be sufficiently small to be entirely emptied at each pulsation, in order to avoid any settlement of the blood through repose. Nor should it take from the one vein more at each expansion than it can discharge into the other, and this without overloading the heart of the patient, or losing one drop of the blood generously offered; besides, it should act in a manner at once rapid and innocuous to both parties concerned.

The blood should continue to live without becoming thicker and without transformation in the vascular system which receives it, and with which it should agree in its physical, chemical, physiological, and vital properties; consequently it must be blood from the same species of animal.

Lastly, this "transfuser" can only be constructed of a substance which, owing to its neutrality (or want of active chemical properties), is entirely without hurtful effects on the blood, thus avoiding all loss of temperature, of gas, of internal movement, of density or of vitality.

Of all the bodies which present themselves to the mind as adapted to this purpose, none answers so well as pure, natural, and unadulterated caoutchouc or india rubber. This substance, when free from admixtures, impurities, and vulcanisation, all of which render ordinary commercial caoutchouc so unfit for surgical purposes, is eminently adapted to this use.

We may therefore sum up the following points as being absolutely necessary in order to ensure a successful transfusion.

(1.) That the blood should be from a similar origin, that is to say, blood from man to man; venous blood into the vein.

(2.) That it should retain its vitality and remain unaltered in its internal composition, in its movements, in its gases, its fibrine, and its globules.

(3.) That its quantity and its velocity should be entirely under the control of the operator.

(4.) That the operation should be rapid, simple, and without danger to either subjects.

Dr. Roussel's *transfuser* is an altogether new and original apparatus. It affixes itself to the skin of the blood-supplier by means of an annular cupping glass made of caoutchouc from which the air is exhausted by a special elastic ball. In the centre of this india-rubber cupping glass passes a rigid cylinder, which constitutes the mouth of the transfuser. To the lower extremity of this cylinder is adapted a lancet, the direction and length of which are easily and exactly regulated. The suction ball (which acts as a pump) opens into the cylinder, as does also an aspirating tube, which acts by means of water. The suction or pumping ball terminates in two pipes, separated by means of a double stopcock. As soon as the transfuser has been affixed (by the production of a partial vacuum) to the arm of the subject destined to furnish the blood the aspirator tube is plunged into tepid water, when the water will rise and fill the entire apparatus, driving out at the same time the air therein contained. One of the pipes or tubes (canules) is introduced full of water into the ready prepared vein of (say) an anæmic woman. The two arms are thus united by a channel full of warm water, and quite free from air. The tube of the aspirator in connection with the water is now closed by means of a stop-cock. The vein of the blood given is now opened by giving a sharp blow on the head of the

lancet. The blood issues and follows the retreating water, and the mixed blood and water flow from the second tube. When the blood flows pure (free from water), one need only turn the stopcock which is placed at the point of bifurcation of the two tubes to ensure its introduction into the vein of the patient perfectly free from any possible alteration or contact with the air. The suction or pumping ball has a capacity of ten grammes of blood, so that the number of pulsations given to this ball furnishes the operator with an exact measure of the amount of blood transfused. It is necessary to give fifty grammes per minute, or about half a gramme for each pulsation of the "heart" of the apparatus. A good transfusion should supply a total of about 200 grammes of blood, which may be furnished in from four to five minutes.

The necessity for transfusion is undeniable in all cases of great hæmorrhage, either during accouchement or on the battlefield. The adoption of a good transfuser is obligatory in our army and in our navy, even as it has already been adopted by the Governments of Austria, Belgium, and Russia, which have furnished all their military surgeons with it.

The violent fevers contracted in the colonies, certain typhoidal maladies, several kinds of chlorosis, and consumptions throw the patient into a state of prostration over which no medicament can triumph, and which leads to a fatal issue by a gradual but complete atony. The stomach no longer digests, the heart becomes enfeebled, the brain no longer receives sufficient vital excitation, and falls into a state of somnolency which frequently leads to loss of the intellectual powers, to marasmus, to melancholy or to lypemania.

In such cases as these the rich globules of the transfused blood reawaken the dying organism; life reacquires vigour, and the brain is restored to its wonted intellectual activity.

Finally, life may be by these means prolonged in certain cases in which no other operation can be per-

formed, such as cases of cancer in the stomach or other organs.

There is, therefore, a very large number of diseases which can profit by the invention of Dr. Roussel, and we trust that our hospital and family surgeons will soon make great use of it.

Statistics prove that in England about 400 women die annually of hæmorrhage during accouchement. Henceforth it will be a grave fault on the part of the accoucheur if he permits a woman to die of hæmorrhage without having tried transfusion before death closes the scene. Transfusion, by the excitation which it awakens throughout the entire organism, reinvigorates the irritability of the fibres of the womb. These immediately contract and the hæmorrhage ceases at the same time, and it has never happened that the transfused blood has been lost. Likewise in chronic hæmorrhage, such as we find in chlorotic women affected with uterine fungosities, the fresh fibrine of the transfused blood cicatrises the opening of the capillaries and prevents new hæmorrhages.

As, during accouchements, hæmorrhage is very sudden and rapid, it is not possible to wait while one sends to borrow a "transfuser," so each accoucheur should always possess one in his instrument case.

The essential qualities in Roussel's transfuser are the purity of the caoutchouc, the absence of metal or of glass, and the precision of its construction.

A very bad imitation is sold in London; I have seen one at Dr. John Williams'. This article is very badly made, and has already caused several accidents in Germany and in France.

I prohibit absolutely that it should be called by my name. I do not recognise any instrument which I have not verified and SIGNED myself.

Dr. Roussel showed the mode of employing the "transfuser" on the arm of a robust man. In order to exemplify the safety and the exactitude of the working of the lancet, he at first only made a slight prick on the skin,

and showed to the assistant that he had not pierced the vein; then replacing the apparatus he lengthened the lancet, and passing the blade into the same incision on the skin he opened the vein; pure blood now flows in abundance from the pipe. It is easy to understand that if this pipe were introduced into the vein of a hæmorrhagic woman she would certainly be saved by the transfusion.

[Dr. Roussel has performed a large number of transfusions, accounts of which are published *in extenso* in his work 'Tranfusion,' Paris, Osselin Editor, 1876.]

A CASE OF CÆSAREAN SECTION PERFORMED ON ACCOUNT OF EXTENSIVE MALIGNANT DISEASE OF THE CERVIX UTERI.

By A. L. Galabin, M.A., M.D.,

ASSISTANT OBSTETRIC PHYSICIAN TO GUY'S HOSPITAL.

Elizabeth N—, æt. 36, was a patient under the care of Dr. Wallace, of Hackney Road, who found her to be suffering from extensive malignant disease of the cervix uteri, complicated by pregnancy of nearly eight months' duration. Recognising that there would be extreme difficulty in effecting delivery, he sent her to be under my care in Guy's Hospital, where she was admitted on November 16th, 1876.

She had previously had six children, of whom one was stillborn, and two miscarriages. Up to the commencement of her last pregnancy menstruation was regular and rather scanty, and she considered herself in good health. The last period ceased on March 24th, 1876. When about four months pregnant her health began to fail; she

lost her appetite and suffered from severe pain in the hypogastrium, which was felt chiefly at night, and prevented her sleeping. When she was pregnant about six months hæmorrhage commenced, and this had continued ever since with not more than a day or two's interval. For about the same time the vaginal discharge had become extremely offensive. For about three weeks before admission she had suffered from more violent pain accompanied by frequent vomiting.

The fundus uteri was found not quite to reach to the edges of the ribs, and the size of the uterus appeared to correspond to a pregnancy of somewhat less than eight months. The fœtal heart was heard, its rate being 140. On vaginal examination the edges of the os were found to be irregular and ulcerated, and it was surrounded on all sides by a ring of densely hard carcinomatous infiltration, the depth of which at all parts was at least one inch. The vaginal discharge was intensely offensive. The os did not admit the finger, and the cervical canal appeared to be of considerable length.

On November 21st the hæmorrhage had ceased for several days, and the pain had become less severe since the patient's admission to the hospital. On this day Dr. Braxton Hicks examined the patient with me, and he agreed in thinking that Cæsarean section would probably give the mother at least as good a chance of life as any other mode of delivery, and that if it were performed a little before full term was reached there would be every reason to expect that the child could be saved. We had, as we supposed, at least four weeks still before us, and it was arranged that Dr. Oldham should come and see the case, and give us the benefit of his advice.

I next saw the patient three days later, on November 24th; I then learnt that on the evening of the 21st she had felt increased pain. On the morning of the 22nd she had severe rigors accompanied by vomiting, and her pulse was found to be 140, temperature 102·6°. She was treated by subcutaneous injections of morphia two or

three times in the day. On the same afternoon the fœtal movements ceased to be felt.

On the 23rd her condition continued much the same.

On the morning of the 24th the temperature had fallen to 101·3°, and pulse to 128, but in the afternoon her pulse was again 140, and temperature 102·8°. She was then seen both by Dr. Braxton Hicks and myself, and we found that the uterus was in a state of continuous rigidity. The fœtal heart could no longer be heard. The patient herself had considered her pain to be of the same nature as that which she had felt for some months past, and neither the nurses nor the resident medical officers had recognised anything resembling the onset of labour pains. The latter had regarded the elevation of pulse and temperature as due to some inflammatory process about the diseased parts. Scarcely any dilatation of the cervix had taken place. The os would admit one finger for a short distance, but not far enough to reach the membranes.

It was decided that the condition of the patient was a desperate one, and that Cæsarean section appeared likely to afford her the best chance, although there appeared no longer to be any hope of saving the child. She was removed to a private room used for cases of ovariotomy, and the operation was performed at 9 p.m. the same evening, in the presence of Drs. Barnes, Gervis, Osterlow, and other gentlemen. Dr. Braxton Hicks was unfortunately unable to be present. I made no attempt to rupture the membranes previously, since, the child being probably dead, and the vaginal discharge excessively offensive, I feared that the uterine contents would rapidly become offensive likewise, as soon as air was admitted, and immediately before the operation it would have been undesirable to make any vaginal manipulations for fear of contaminating the hand. The anæsthetic used was the mixture of alcohol, chloroform, and ether. The pulse had risen to 150 before the operation was commenced, and was very compressible. Scarcely any bleeding took place while the incision was made through the uterine wall, which

was very thick. The placenta did not appear in front, and the uterine incision was enlarged to a length of five inches before the membranes were ruptured. The right arm was first felt, but the right knee was easily reached, and the fœtus extracted thereby. Its skin was peeling off, but neither it nor the liquor amnii was at all offensive. The placenta was easily extracted, but the uterus did not contract firmly, and copious hæmorrhage occurred from the placental site. A faradic current, applied by a battery which had been prepared in readiness, appeared to be of no avail, and the application of ice and subcutaneous injection of ergot were equally fruitless. At length, as the patient's pulse began to fail, the clots were washed out by a stream of ice-cold water, and a solution of perchloride of iron was then applied on sponges to the interior of the uterus. Even this caused no general contraction, but appeared to produce some shrinking of the internal surface. After steady pressure for some time with these sponges, all bleeding stopped. A large drainage tube was passed through the cervix and out at the vulva, but this was removed about an hour after the operation, since little fluid came away, and it was feared that it would admit air. The uterine wound was closed by interrupted sutures of fishing-gut. The child was a female, and appeared to be of rather more than eight months' development, weighing 6 lbs. 13 oz.

The patient was much blanched at the end of the operation, and it was feared that transfusion might be required, but she recovered her colour in a short time, subcutaneous injections of ether having been given. The next morning, at 10 a.m., the pulse was 160; temp. 99·8°. In the afternoon her condition appeared worse, and a little watery fluid was oozing through the abdominal wound. One stitch was therefore removed at its lower angle, and a solution of salicylic acid, one part in 300, was injected into the peritoneal cavity. This was afterwards repeated at intervals, the wound being covered meanwhile with a pad of salicylic wool. In the evening temperature had fallen

to 98°; pulse to 150. Vomiting then commenced, and the patient became weaker, notwithstanding the use of nutrient enemata. At 10 a.m. on the 26th the pulse was 160, very feeble; temp. 103·2°. At 11 a.m. the patient became delirious, and she died at 1.30 p.m.

The autopsy was made twenty-six hours after death. An early stage of peritonitis was manifested by dark injection of the peritoneal membrane, but, on account of decomposition, it was rather difficult to judge of this. The peritoneal cavity contained only a little watery fluid. The uterus was slightly adherent to the anterior abdominal wall. It was distended, so that the fundus reached above the umbilicus. Upon pressing upon it some black fluid could be squeezed out through the wound, but none had escaped during life. The sutures had become somewhat loosened by cutting partially through, but the knots were firm, and the fishing-gut stiff. The cavity of the uterus contained a good deal of black fluid, and some small, very hard clots. An ulcerated cancerous surface was seen from the peritoneal side at the base of Douglas' fossa, and it was found impossible to remove the parts without tearing a large opening into the vagina through the broken-down tissue at this situation. It was thus clear that the fœtus could not have been extracted by the natural passages without opening the peritoneal cavity extensively. The liver and spleen were much softened.

I was led to try sutures of fishing-gut for the uterine wound in this case from the fact that Professor A. Martin, of Berlin, has published several cases resembling those of Dr. Meadows and Dr. Routh, in which the patient went on well for several days, symptoms of peritonitis then suddenly arose, and, after death, sutures of carbolised gut were found to have become untied. These instances would seem to show, not only that sutures of carbolised gut cannot be relied upon for the uterine wound, but that, at any rate, when firm and unremitting contraction of the uterus cannot be secured, sutures of some sort are useful, so long as they hold fast. The experience of plastic operations

shows that stout fishing-gut may be relied upon, and I consider it preferable to silver wire to leave permanently within the peritoneum, and less irritating than silk.

It may be open to some doubt what was the sequence of causation in this case. Did the uterus, meeting with an insuperable obstacle, pass insensibly into continuous action without any rhythmical pain, and without the patient or any of those about her suspecting that labour was commencing? And was this the cause of the death of the fœtus and the patient's perilous condition? Or was the first step a septicæmia, set up by absorption of the foul material, combined with the susceptible state of the blood which exists near the full term of pregnancy? And was this the cause of the death of the fœtus and consequent irritation of the uterus? In favour of the view that septicæmia was the primary condition was the fact that almost the first symptom was the occurrence of rigors, with a rapid rise of pulse and temperature to the highest point attained during the three days preceding the operation, while this afterwards underwent a temporary diminution. The fœtus also appears to have died about twelve hours after the commencement of the symptoms, a shorter time than would seem likely to be required for such a result to be produced by contraction of the uterus, the membranes remaining intact.

Dr. ROGERS could not allow the opportunity to pass which Dr. Galabin's interesting but fatal case of Cæsarean section gave him to make some remarks and state some facts bearing upon one part of the management of this important operation. Very recently in another society, the Medical, a paper had been read on a case of Cæsarean section which had been successful to both mother and child, and this had been the second successful Cæsarean operation performed in the same manner by the author of the paper. Dr. Rogers alluded to the fact that in neither case had sutures been put into the uterus; great care, however, had been taken to obtain good contraction of the uterus by secale, ice, and pressure of the fingers inside the uterus, ere the abdominal wall was closed. Dr. Rogers had assisted in four Cæsarean sections; all the uteri had been ligatured, three with silver wire

and one with catgut; one only had recovered, one closed with silver sutures. He had seen two other patients who had recovered from the operation, and in neither had sutures been put into their uteri; these were operated on by a former Fellow of this Society, his colleague, Dr. Greenhalgh, who had performed on no less than ten Cæsarean sections, and had saved all but one, and this one Dr. Rogers believed had been ligatured. A most interesting paper on this operation had been published in the 'Obstetrical Society's Transactions' by Dr. Greenhalgh, and was deserving of careful perusal. In Germany and elsewhere on the Continent he understood that it was deemed most advisable not to apply ligatures to the uterus, and the success that had attended these operations was most encouraging.

Dr. Barnes cautioned against accepting the conclusion that Dr. Rogers' statement pointed to. The bare facts that in certain cases the uterus had been stitched up and death followed, whilst in certain other cases no sutures were used and recovery followed, did not warrant the inference that the sutures had anything to do with the result. Cases that did not require sutures were those in which the uterus closed naturally by contraction. These cases were just those which were most likely to recover. On the other hand, the cases that required stitching were those in which no contracting power existed; and were, therefore, cases which were likely to prove fatal under any mode of treatment.

Dr. Routh asked how long the wound in uterus had been kept open before it was closed? In Dr. Edmund's case three quarters of an hour were allowed, the uterus being irritated all the while by the fingers and ice, and not until firm contraction was ensured was it closed, and then no ligatures were needed. He quite believed the ligature did harm, and certainly in most cases of recovery of late they were not used.

Dr. Galabin, in reply, said that the perchloride of iron had been applied when the pulse and face of the patient showed that her life was in immediate danger from hæmorrhage. After death the peritoneal cavity only contained a little watery fluid. He thought that the cases of Professor Martin's, of Berlin, as well as those of Dr. Meadows and Dr. Routh, in which the patient did well for several days, and the carbolised gut sutures were found to have become untied, showed that in them the sutures had been useful so long as they held firm.

CASE OF LABOUR WITH EXTREME ELONGATION OF THE CERVIX UTERI.

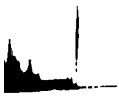
By Robert Barnes, M.D.

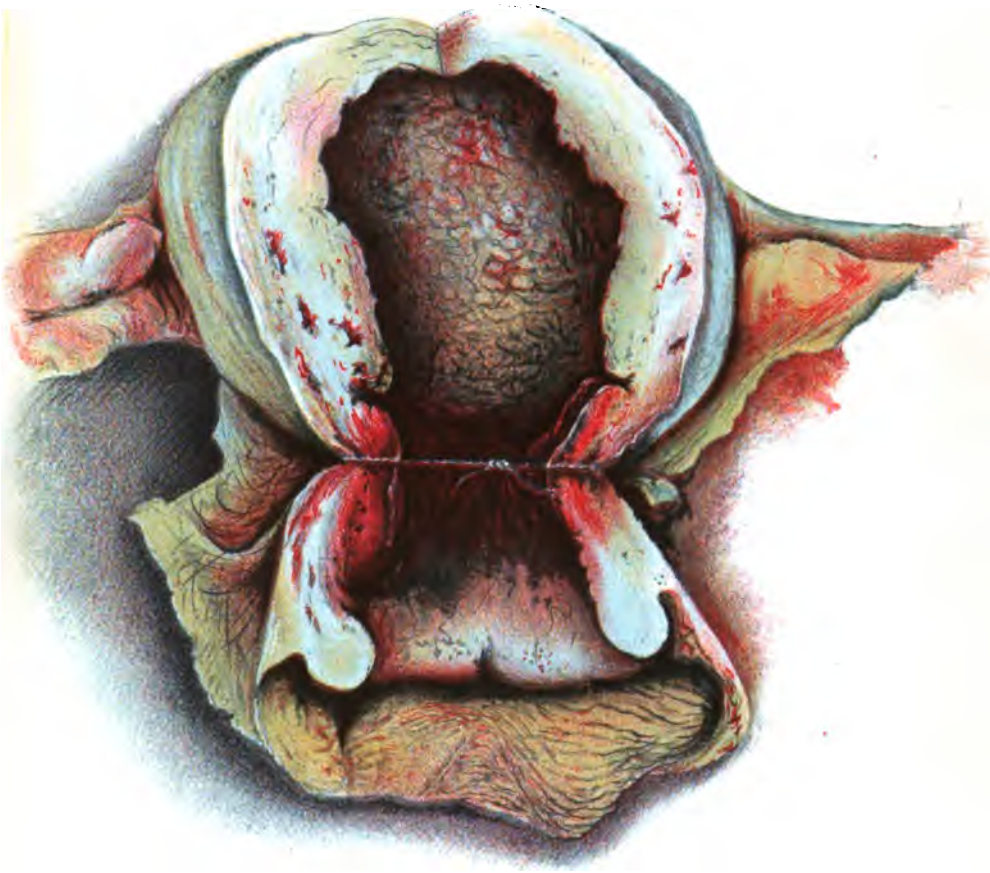
Dr. Barnes exhibited the uterus of a woman who had died after premature labour. The interest of the specimen consisted in the fact that there was extreme hypertrophic elongation of the cervix, so that the os externum had protruded beyond the vulva with complete eversion of the vagina. The patient died of pyæmia connected possibly with the injuries sustained during the labour by the abnormal state of the canal the child had to pass through. The specimen was another illustration of this form of dystocia which was described in the 'Obstetrical Transactions' for 1874 by Dr. Roper.

The subject of this history presented herself as an outpatient at St. George's Hospital. There was complete protrusion of the os externum uteri and eversion of the vagina. The following account is from the notes of the obstetric assistant, Mr. Harper.

M. A. G—, æt. 35. Has had four healthy children, and has been married several years. Has had bad health for some months, during which time she has noticed gradually increasing protrusion of the "womb" through the vulva. This has lately given much pain and bearing-down sensation.

The os uteri on November 12th was at least four inches external to the vulva. The cervix is greatly hypertrophied and elongated, and the vagina inverted. The protrusion was reduced, and the parts remained *in situ* until and during the confinement, which took place on November 20th. The child was about six weeks premature. The labour was very quickly over; it presented no complication, the placenta being expelled by natural effort a few minutes after the expulsion of the child.





F. D. Drewitt del.
Dr. Westmacott direx.t

W. West & Co. chr. lith.

Uterus.—Body about six inches in length and width, full of decomposing broken-down blood clots. Mucous lining ragged and hypertrophied.

Cervix elongated about three and a half inches, and much hypertrophied. There is a broad ring of thickened ecchymosed tissue at the junction of the cervix and the body of the uterus.

Stomach.—Mucous lining much hypertrophied and inflamed. Blood effused into the submucous tissue. Dark clotted blood in cavity of stomach.

All the tissues of the uterus were more or less indurated from inflammation. The veins on either side, Fallopian tubes, and ovaries, and broad ligaments all more or less inflamed. Veins full of coagula with thickened coats.

The specimen exhibited was a valuable example of a rare complication. It was another instance of the condition of which the author had designed a diagram in illustration of a case described by Dr. Roper in vol. xv, 'Obstetrical Transactions,' and reproduced in the third edition of the 'Obstetric Operations.' The general appearance simulated prolapsus of the gravid uterus. Probably some of the reported cases of complete prolapse of the gravid uterus were really cases of this kind, that is, pregnancy, with hypertrophic elongation of the cervix uteri.

DEFORMED FŒTUS.

Dr. Roper exhibited a deformed fœtus which was born at the seventh month of pregnancy and lived half an hour after birth.

The head and upper part of the body, clavicles, and humeri were perfect. From external examination there seemed to be a deficiency of the radius in each forearm. The thumb was absent in each hand.

The right thigh was entirely wanting, and so far as could be ascertained through the skin the os innominatum of the same side was not to be felt.

The left femur seemed to be perfect; but below the knee was a pointed, simple spike of bone covered with skin, and not terminated by any nail. The skin was continued across the base of the trunk so as to leave no cleft between the nates. There was no appearance of anus nor opening of genital or urinary organs. No perinæal raphé. The skin here had the same uniformly smooth condition as at any other part of the body.

THE OBSTETRICAL ASPECTS OF IDIOCY.

By J. Langdon Down, M.D., F.R.C.P.,
PHYSICIAN TO THE LONDON HOSPITAL, ETC.

If one regards the large number of children in our community who, grow up with defective mental power, children who, although not all fairly to be ranked among decided idiots, yet have such lesion of the faculties of perception and reasoning as to bring them under the category of the feeble-minded, and if one has reference to the terrible anxieties such children entail on their parents and the burden they often are to the struggling of our race, one cannot fail to be impressed with the importance of anything connected with the circumstances of such a condition.

I had, therefore, no difficulty in responding to an invitation to bring before this Society some of the opinions which have been impressed upon me, having relation to facts which come under the immediate regard of gentlemen practising the obstetrical branch of our profession.

The data on which these remarks are based have been

collected over a space of more than eighteen years, and relate to two thousand children who during that time have come under my observation, and about whom I have been able to gather information. They have been collected with great care and with an anxious desire to exclude all doubtful matter.

One very interesting and important point suggested by my inquiries is that of primogeniture. We know how much our political system hangs on the laws of primogeniture, how the firstborn inherits property and inherits too the power to rule over his fellows, and how much our whole social structure is built thereon. Nevertheless, the result of my statistics shows that no less than 24 per cent. of all the idiot children I have seen are primiparous offspring. How many primiparæ there are who although not coming under the category of idiots are yet somewhat incapable my statistics, of course, do not reveal.

It will be obvious, however, that before any real value can be assigned to this statement it will be necessary to inquire into the average number of children belonging to these families. This I have been at great pains to ascertain, and I find that up to the time I had been consulted in each case 6·91, or nearly seven, was the average number of living children born to the parents who have had an idiot child. Fourteen per cent. were second born, 9 per cent. fourth, 5 per cent. fifth, 7 per cent. sixth, 10 per cent. seventh, 2 per cent. eighth, 9 per cent. ninth, 2 per cent. tenth, 2 per cent. eleventh, 1 per cent. twelfth, 3 per cent. thirteenth, and 1 per cent. fourteenth. The question naturally presents itself as to what should give this undue preponderance of idiocy to primiparæ. I have no doubt that it may be largely attributed to the exalted emotional life of the mother; her life is one of exaggerated hopes and fears; she is prone to live in an unnaturally expectant atmosphere. She is going through an experience altogether new, with untried responsibilities both social and domestic. She is more than usually responsive to external impressions and influences, certainly more to subjective

feelings and whims. But, as I have elsewhere observed, it would betoken a narrow view of the matter if we restricted our attention to the emotional life of the mother and kept out of sight the emotional tendencies of the father. No one who has seen much of private practice is unaware how much men are frequently influenced by the responsibilities of the matrimonial state how the doubts as to their own virility, of their being able to make a position in the world after having given hostages to fortune, the disturbing elements of a new social position both with regard to their immediate circle of friends and to the new relationships formed. All these and some others are perturbing influences to many men, and while, therefore, the emotional life of the incubating mother is an important element, the emotional tendencies of the procreating father must be regarded too as a cause of the increased frequency of primiparous idiots.

But there is another cause which will naturally occur to the Fellows of this Society as obstetricians. I refer to the increased difficulties of parturition. No one can have regard to the smallness of the maternal passages, to their undilated character, to the rigidity of the perinæum, and to the tediousness of the labour, without being impressed with the influence they must have in interfering with the integrity of the cranial contents, and to their inducing a condition perilous to the future mental health of the little one. They are conditions which frequently give rise to instrumental interference, but above all to a state of suspended animation which in my opinion it should be the earnest desire of the obstetrician to avoid.

I think it cannot fail to strike the Fellows of the Society as a very important fact that no fewer than 20 per cent. of the idiots of my investigation were born with well-marked symptoms of suspended animation—symptoms which required marked and strenuous efforts for their removal and to effect resuscitation. Moreover, it is specially interesting that while, as we have said, 24 per cent. of idiots generally are primiparous, as many as 40 per cent. of re-

suscitated idiots come under this category. Clearly, then, suspended animation is a condition as far as possible to be avoided by the practical obstetrician.

Bearing on this part of the subject is the question of instrumental interference. I have made a careful inquiry on this subject over a very large area, and with the expectation I should find a large amount of idiocy to be the result of "meddlesome midwifery," but I am bound to say that my statistics falsify my anticipations, and redound to the care with which instruments are employed in parturition. I find from an examination of all my cases about which positive information could be obtained that in only 3 per cent. were the forceps employed. In every case, however, where they had been employed the friends of the child believed that the instrument alone was the cause of the disaster, while in nearly every case I could discover quite sufficient to account for the mental defect in the neurotic history of the progenitors. In a very few cases, only a small fractional percentage could I arrive at the conclusion that the use of the forceps was the principal cause of the calamity.

I find in a very large number of my cases that the labour was stated to be unusually tedious and prolonged. Dr. Playfair has shown that the employment of the forceps does not interfere with the viability of the offspring, and that a prolonged labour is more compromising to the life prospects of the child than a judicious and timely application of the forceps. Certainly my statistics make clear to me, contrary to what some years since was advanced by Dr. Arthur Mitchell and in harmony with Dr. Ramsbotham's experience, that the use of the forceps is not an important factor in the production of brain disease. When, however, it is borne in mind how frequent is the association of suspended animation with idiocy, it cannot, I think, be too strongly enforced that the mental integrity of the child is more likely to be compromised by a prolonged pressure in the maternal passages than by skilled employment of artificial assistance. The accoucheur who postpones in-

strumental help often does so at the risk of terrible consequences to the nervous system of the little one he is solicitous to protect.

I have collected a good deal of information as to the influence of twin births. There is a general prejudice that the individuals of twin births are not so strong physically. Mr. Galton has been collecting materials on this and cognate subjects, but I am not aware of his results. Taking my last thousand cases, only 2 per cent. were twins, while, singularly enough, the same thousand show that in 2 per cent. of the cases the mothers had given birth to twins who were not afflicted in any way. This would appear to indicate that the existence of twins does exercise some prejudicial influence, seeing that among one thousand mothers who have borne an idiot child, where they have happened to be twins, no fewer than a quarter of them were idiots.

A very potential cause in the production of idiocy is the physical health of the mother during gestation. In 20 per cent. of my cases there was a history of marked physical disturbance. In 4 per cent. there was a history of serious falls—falls which were followed by alarming uterine hæmorrhage. In 6 per cent. there was an account of prolonged ill health, and in no fewer than 10 per cent. was there a history of sickness—cases in which the vomiting had been marked and persistent, and had given rise to anxiety on account thereof. I feel quite sure that sickness during pregnancy is an important producer of idiocy and is a symptom which, from this grave aspect of it, claims the earnest attention of the obstetrician. It will be readily understood that any cause which would render the mother anæmic would be a source of peril to the mental health of the child.

From what I have already said it will have been gathered that I lay great stress on the emotional life of the child-bearing woman as a potential cause of idiocy. I cannot, however, attach greater importance to this aspect of the subject than it deserves. It is one of most serious import-

ance and bespeaks one's careful regard. In no fewer than in 32 per cent. of my cases was there a well-founded history of great physical disturbance in the mother by fright, intense anxiety or great emotional excitement. They were all cases in which a strong impression had been made on the mind. In a large number of instances the fright was attended by syncope. They were cases of fright arising from threatened outrage to the person, or where they had seen their own children in great peril or killed, or where intense anxiety had existed in consequence of the fatal illness of their husband or the loss of several of their children. No doubt they were troubles in many cases which might have been borne with equanimity by a philosopher, but the mothers possibly were more than usually responsive, and with an unstable equilibrium required only the stimulus of fear or anxiety to exercise a morbid influence on the development of their children. No doubt the emotional tendency of the mother, as depending on the same neurosis, may be regarded as a cause, but the actively potential cause in all the cases I have referred to was mainly the undue response to some external impression. The lesson to be gathered from such data is surely a very important one, viz. to maintain the child-bearing woman in the most equable state, to shield her as much as possible from all causes which would disturb unduly her emotional life, and to maintain in her that hopeful spirit and placid calm which is so much to be desired both for the woman herself as well as for the infant she is incubating. These data teach us how important it is that for women generally the emotions should not be cultivated at the sacrifice of their judgment and self control.

The relation of sex to idiocy presents some matters of interest; there is a marked preponderance in the number of male over female idiots. The proportion among the two thousand I have noted stands in the ratio of 2·1 to ·9, or rather more than twice as many male as female. It is, I think, a very fair conclusion to arrive at that one

very important factor is the increased dimension of the male over the female infantile cranium. This would be likely to give rise to prolonged and difficult parturition to that continued pressure and that suspended animation which I regard as so disastrous to the cerebral functions. Another reason is the greater tendency according to my notes to infantile convulsions among males who have become idiots than among females who have become idiots, a circumstance which gives rise to a larger amount of what I call *accidental* idiocy among males. These statistics are, moreover, in harmony with what we know of the greater viability of female over male children. The question of sex opens up many interesting problems in relation to idiocy. I can only here intimate that where the origin is purely of a neurotic character my notes show that when the neurosis is paternal the male progeny are liable to suffer and the female to escape; where, on the contrary, the neurosis is maternal the female progeny are likely to bear the stress.

I have been at some pains to ascertain whether there is any relation between the administration of ergot of rye and idiocy. I have found, however, the answers so vague and the knowledge of my informants so uncertain that it has proved quite hopeless to arrive at any results which would have a scientific basis. Often the mothers have imagined that ergot had been used when there had been no such administration, and it is obvious that in many cases the medicine may have been taken without the mother being conscious that any drug had been made use of.

The diagnosis and prognosis of idiocy are both matters which perforce fall to the lot of the obstetrician, and it is of no small importance that he should have definite bases on which to form and give an opinion. An error in diagnosis would lead in all probability to unpleasant lessening of professional confidence.

The earliest intimations on the part of those in attendance on the child of defect of sight, of unusual fretfulness or peculiarity as to taking food, should lead to very

careful investigation of the structural formation of the child.

In cases which have a *developmental origin* you may find very early physical signs of serious trouble. The cranium must be examined as to its configuration, giving special heed to want of symmetry, to extreme dolicocephalism, to extreme brachycephalism, to rapid shelving at the occipital region, to the condition of the sutures, their premature or deferred synostosis, and especially to the frontal region which often displays the medio-frontal suture still existing, whereas there should have been complete coalescence of the two halves of the frontal bone during intra-uterine life.

Examination of the ocular media and retina will remove the probability of blindness, and indicate that the defect in taking notice of external objects is rather one of cerebral than optical defect. The presence of strabismus should be noted, and the integument about the eye should be examined especially for semilunar folds of skin at the inner canthus—folds which are more frequently present in feeble-minded children than in others, and which I have been accustomed to describe as epicanthic folds. They are according to my experience marks of developmental degeneracy, and should always be looked for. The position of the eyes is worthy of note whether the inner canthi are too nearly approximated as met with in microcephalic or scaphocephalic idiots, or too widely separated as obtains in macrocephalic and hydrocephalic idiots. Observation should also be made as to any oblique position of the eyes as well as their wide separation, such as is met with in that ethnical variety which I have elsewhere described as Mongolian idiocy, a variety of great clinical as well as biological interest, showing that degenerative causes may and often do remove children into a different ethnic type from that of their progenitors. Particular observation should be made as to that peculiar oscillation of the balls called nystagmus, which is very frequently met with in children of the feeble-minded class.

The appearance of the external ear should be noticed, the condition of the pinna, the absence of a helix, and whether the lobule be absent. Observation should also be made as to the seat of implantation of the ear, which in idiots is usually placed further back in relation to the head and face than in normal children. No feature is more worthy of regard than the configuration and position of the external ear.

The mouth should be examined as to its palate, whether it be arched or gothic-shaped; the tongue, whether it be too large, rugous, fissured, and with its papillæ enlarged; the jaw, as to the angle formed by the ascending and horizontal rami, which in idiots is more obtuse than usual.

Examination should be made of the surface of the body as to the condition of the skin—noting whether it has a lax and soddened appearance, especially on the extremities, and whether there be any defective coalescence at the bottom of the spine. The muscular system should be examined, special observation being made as to the existence of any automatic movements, contractures, or spastic rigidity. In early childhood as well as in more advanced life too much attention cannot be given to these physical signs of cerebral disease. They are, many of them, the marks of that kind of idiocy which is inherited or developmental in its origin, of that kind which is so often met with as the outcome of a gradually degenerating race.

Idiocy, however, is not always strictly *developmental;* in a large number of cases it is acquired or *accidental.* This includes those cases which occur from inflammation, often of a slow and insidious character, of the meninges whereby products are thrown out which afterwards interfere with the nutritive supply to the encephalon. It includes also the recoveries, although rare, from tubercular meningitis, from infantile convulsions, and from acute diseases of various kinds. It includes also those arising from traumatic injury as well as those where narcotics have been injudiciously and probably furtively given.

It is of great importance to be able to differentiate these accidental cases from the developmental ones, and this can only be done by having regard to the physical diagnosis I have before referred to. Often the friends of the children refer the origin of the disaster to a careless nurse who has let the child fall, to some remembered fright, or to an accoucheur who has used instruments unadvisedly; but a reference to the physical condition of the child may tell one that the cause was long antecedent to the one suggested, and that far back in intra-uterine life or possibly before, in the history of the progenitors, must the real cause be traced.

Not very long since a leading medical man in one of our provincial towns was sent for to see a little child whose birth he had attended, in a state of severe convulsions. The child's life was in imminent peril. Taking the baby out of the bath he poured a stream of cold water from a jug on the head. The convulsions ceased, the child lived, but it lived to manifest undoubted signs of idiocy. Then came a charge of malpraxis; the idiocy was referred to the stream of water, and a trial at the assizes took place. We were able by a careful physical examination of the child to assert with the greatest confidence that the lesion was developmental and perfectly incompatible with post-uterine causation. The case broke down, and the reputation of the practitioner was saved.

But not only is physical examination important in a diagnostic point of view; it is of no less value, as we shall see, in prognosis. What is to be the future of our child? is a question which will be put with more or less earnestness, usually with an earnestness from which there is no escape, and the reply will be treasured in years to come. I find that a large number of replies are given, apparently based on some sort of belief in periodic leaps. The favourite epoch is seven years. The friends are often lulled into a false security under the notion that at seven, fourteen, or twenty-one years of age all will come right. I know nothing of such cataclysmal improvements. The misfortune is that

such opinions prevent all active means being neglected, and when the longed-for time arrives it is found that precious opportunities have been lost, that with increased physical development there has come a stronger will, more resolute disobedience, and an absence of intellectual and moral growth which proper training might have effected.

But a no less fallacious opinion is often based on the good looks of the patient. The child probably does not speak at the proper time, rolls its head in a rhythmical way, looks into space, or makes monotonous noises with its lips. Oh! it is often said, have no anxiety, all will come right; he is so bright-looking, so comely; he has no deformity of head, no lesion of limb. The friends have no difficulty in falling in with such a doctrine, and they await that future which is predicated in full reliance; but it is a future which never comes. It is experience alone that could tell one that the prognosis in such a case is far less hopeful than in the case of one whose misplaced eyes, ill-shaped cranium, and distorted face gives ready indication of his feeble mind.

The case we have been considering is one of *accidental* origin. Something since birth has given rise to the disaster and has left no trace on his exterior. With such an one we are able to predict much less response to training than in the case of one whose defects have had an origin anterior to birth. It may be taken as a rule which has but few exceptions, that congenital idiocy is more amenable to training than post-congenital, that, in fact, it is more hopeful to have to do with an ill-developed than with a damaged brain, and having regard to what I have laid down as to the way developmental idiocy has its physical signs and configuration, that the prognosis is, contrary to what is so often thought, inversely as the child is comely, fair to look upon, and winsome.

It will be readily conceived how many interesting points of departure are suggested by the topics I have touched on. I have endeavoured, however, not to wander into simply philosophical paths, but to confine myself to what

I considered had most direct bearing on "the obstetrical aspect of idiocy."

Dr. F. C. CORY stated that, in a practice of over twenty-five years of careful observation upon mothers and infants, he had never found any ill effects upon the intellect of the latter in after life which he could trace to the use of ergot.

Dr. J. BRAXTON HICKS remarked that the paper just read was full of matter for careful consideration and observation. He had felt, as no doubt many also had, that many difficult labours must be injurious to the child.

Dr. BARNES observed that the Society was much indebted to Dr. Langdon Down for importing into their 'Transactions' and discussions new elements or aspects of obstetric practice. Dr. Down was doubly competent to discuss the topic he had chosen. His early experience as obstetric assistant at the London Hospital had made him familiar with operations and obstructed labours. The paper was an able statement of a very interesting question. Dr. Barnes thought that much further investigation, much cross-examination, was required before we could accept the conclusion pointed out, that obstructed labours attended by suspended animation of the child was an important cause of idiocy. The fallacies of statistics were so numerous and so liable to be overlooked that this method of solving the question demanded very full inquiry and deliberation. Looking back to his own experience, he had delivered a great number of children by forceps and turning, and suspended animation had frequently occurred, but he could not call to mind any facts to show that idiocy was traceable to the obstructed labour. But those who had a better opportunity of observing the subsequent career of children from under similar circumstances might be able to throw some light upon the question. Evidence of this kind could not be deficient. One of the earliest papers read before this Society was one on the same subject by Dr. Little; it advanced similar opinions to those of Dr. Down.

The PRESIDENT said that the Society was always glad to receive contributions to its stock of knowledge from collateral sources, and the interesting paper which had been read had really important obstetric bearings. In the inferences which might be drawn from it, however, it was important to exclude as much as possible the various sources of fallacy, and he might remark in passing that suspended animation must not be regarded too exclusively as produced either on the one hand by the pressure of a too prolonged labour, or on the other by the compression of the forceps when they had been employed. Suspended animation was likely to occur whenever a child was born with an imperfectly developed nervous organization, and it was well

known that small feeble children expelled with great ease from the maternal passages were often difficult to resuscitate. Referring to one of the idiot children shown by Dr. Wiltshire, he said it would be well not to attach too much importance to its difficult delivery as a cause of its mental weakness, because it was obvious that the mother who stood by was an imperfectly developed creature in every respect, and according to the theory of natural selection for healthy progeny should never have been a mother at all.

Dr. FLETCHER BEACH remarked that his experience at the Clapton Idiot Asylum to a great extent bore out the remarks made by Dr. Langdon Down. Of 500 cases which had passed through his hands in the course of the last eighteen months, he had been unable from various causes to get accurate histories of more than 100. On analysing these, it was found that eleven males and nine females were first-born children. Of the eleven males, two were born after tedious labour; in one there was hereditary taint, and in another the mother had been much frightened during pregnancy. Of the nine females, one was born after tedious labour; in four the mothers had suffered accidents and frights during pregnancy, and in one the mother had been subjected to much anxiety whilst in that condition. It appeared, then, that, in addition to the fact of a child being the first-born of a family, the condition of the mother during pregnancy must also be kept in mind. On going into this matter more closely, it was found that of nine other males, in eight the mothers had been much frightened or had been subjected to great anxiety during pregnancy, and in one the mother had met with a severe accident; of five females, in four the mothers had been frightened, or considerably troubled during pregnancy, and in one had received a blow on the abdomen. The condition of the mother during labour too must not be overlooked, one child having been born while the mother was in epileptic convulsions. The statistics of idiocy in America point very much in the same direction. Of 675 cases inquired into by Dr. C. T. Wilbur, of the Illinois Idiot Asylum, 339 were congenital, and of these 191 were first-born children. A commission of inquiry into the amount of idiocy prevalent in the State of Massachusetts discovered that 53 of 108 mothers had been subject to grief or anxiety during pregnancy.

Dr. J. BEVERIDGE SPENCE remarked that in connection with and in consequence of the remarks made by some of the previous speakers, may I be allowed to draw the attention of the Society to a special type of imbecility which we at Earlswood are accustomed to associate with a history of tedious birth, and suspended animation. In all the cases of this type which I have seen there has been great improvement manifested in their mental state during their residence at the asylum, and they are all, or nearly

all, capable of receiving and benefiting to a considerable extent by the instruction imparted to them. They have all more or less well-marked choreic movements, in some of the cases scarcely appreciable, in others very evident indeed; the general bodily health in other respects is usually good, and they are not more subject to illness than the ordinary run of children.

Dr. WESTMACOTT inquired whether there was any history of drunkenness in the parents.

Dr. BRUNTON said that he wished to ask those experts who had just spoken how soon after birth they could discover the presence of imbecility in an infant, for he was inclined to think that an important fact was overlooked, viz., that children otherwise born healthy, having been early subjected to artificial and improper feeding—such as biscuits, and other forms of farinaceous diet—become therefrom subject to disorders of digestion and the like, that convulsions or a succession of convulsions ensued, suspended animation resulted, with disturbance of the cerebral functions and consequent permanent physical changes ending in imbecility. He considered this an important factor in the case.

Dr. HAYES remarked that a more minute classification of the cases into microcephalic, dolicocephalic, hydrocephalic, epileptic, &c., groups was requisite, otherwise no safe conclusions regarding prolonged or obstructed labour, instrumental interference or non-interference, as causes of idiocy could be arrived at. Thus, take the cases born of primiparous mothers. From the papers it was impossible to say whether most or all of these had not an intra-uterine origin, or sprung from subsequent disease that had nothing to do with labour or its management. He quite agreed with the President's suggestion respecting suspended animation, and on this point a classification would throw light.

Dr. ROUTH wished to know if in Dr. L. Down's cases any notice had been made of the degree of consanguinity in the parent. In anæmia this effect in inducing idiocy was fully appreciated. and he (Dr. R.) in some inquiries made had come to a like conclusion. The non-elimination of such cases might prove a fallacy in the doctor's inferences.

Dr. GRAILY HEWITT considered Dr. Langdon Down's facts and suggestions most valuable and interesting, but he was of opinion that in regard to the connection between obstructed labour with pressure arising therefrom and idiocy of the offspring, we must examine the facts attentively before admitting that such a connection subsists; and he believed that most obstetric practitioners would concur in the view just expressed by Dr. Barnes. He could hardly believe that if obstructed labour had a distinct effect of this kind it would so long have escaped the attention of obstetric practitioners.

Dr. JAMES EDMUNDS thought that the statistics were worked

out into a fallacious form. For instance, some 24 per cent. of these idiots were found to be first-born children and some 2 per cent. only were thirteenth-born children. But of the children in the community the numbers of first-born, second-born, &c., formed a rapidly decreasing series which, after, say, the twentieth-born children, came down to zero. Therefore, unless the numbers of idiots first-born, second-born, &c., were worked out into relation with the total numbers of children of the same order of birth in the whole community the statistics would be entirely misleading. Taking the average number of children in a family at four, there would obviously be in the community 25 per cent. of first-born children, a proportion practically identical with those show as first-born among these 2000 idiots. Then as to the influence of pressure upon the fœtal head as a cause of idiocy he (Dr. Edmunds) had had through his hands in private practice some years since at least 2500 labours mostly in families then continuously under his own observation, and he had attended a large number of forceps and other difficult cases. But he had no recollection of any facts that went to show pressure upon the fœtal head as a cause of idiocy, and he thought that, had any such facts occurred, they would be in his mind. For the only case of this kind was in one child in a family, all of whom were attended by him where the face came to pubis and the levator palpebra on the left side was paralysed at birth and had remained so ever since, that child still showing the peculiar configuration of head which is caused by such labours. Of that case he had taken large photographs both in profile and in full face, and he no doubt could now look them up. He mentioned this to show that he would have been likely to observe such cases had there been any such relation of cause and effect as seemed to be held by Dr. Langdon Down. But that child was in no way weak-minded, much less idiotic. Of course these were only negative facts, and the views propounded by Dr. Down were of great interest.

Dr. Langdon Down, in reply, said he was much gratified by the discussion which his paper had called forth. To many of the gentlemen who had offered remarks he said that he had intentionally restricted his paper to the "obstetrical" department of the subject, feeling that time would not permit discussion beyond. He thanked Dr. Barnes for his remarks, and pointed out that Dr. Little's paper on the influence of suspended animation on the productions of deformities was a valuable corroboration of his own researches. To the President and various other speakers he replied that it must not be forgotten that there were usually more than one factor in the production of idiocy, often several. What he wanted to convey was that, given a neurotic tendency, the tedious labour and suspended animation might determine the catastrophe, where otherwise all might have gone fairly well.

He had taken great care to exclude all elements of fallacy in his statistics, and with regard to the classification he had adopted on this occasion what he considered the most practical one, viz. into *accidental* and *developmental*.

Report of Subcommittee on Mr. Robert Hughes's Specimen, exhibited at the January Meeting.

The specimen referred to us consists of a placenta with membranes, portion of a healthy funis, and a solid mass attached to the margin of the organ by means of a cord, which contains an artery and a vein six inches in length.

The mass has a flattened ovoid shape, is four and a half inches in length, three and a quarter inches in width, and two and a quarter inches in thickness. It has a firm consistence, except at one extremity where it is somewhat soft, is smooth on the surface, and covered by well-formed skin on which fine hairs are found. It was evidently contained in a separate amniotic sac, for portions of two such sacs are found attached to the placenta.

On section the mass is found to consist of yellow fat, well-formed striated muscular tissue, and connective tissue. It also contains an irregularly shaped piece of cartilage, which is partly ossified. No trace of viscus, limb, or head is discoverable, but near one end of the mass is a small elevation resembling a flattened teat, which, perhaps, may represent an effort at limb differentiation.

The mass is evidently not a mole, but a monstrosity, as it is the product not of the embryo and membranes together, but of the embryo alone.

[When examined by Dr. Woodman in the first instance, some nucleated blood-corpuscles were found in the specimen.]

John Williams,
W. Bathurst Woodman.

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——— ——— translated into Telugu, by Jaganathum Nayudu 8vo. Madras, 1874

——— ——— translated into Canarese, by S. Arokeum Pillay 8vo. Bangalore, 1874

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——— et L. RANVIER. Manuel d'Histologie pathologique *woodcuts*, 3 parts in 1 vol. 12mo. Paris, 1869-76 Purchased.

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CULLINGWORTH (Chas. J.). Hæmorrhage from the Genital Organs in the recently born female child (from Liverp. and Manch. Reports) 8vo. Manchester, 1876 Author.

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DE VITRÉ (Edvardus Denis). Diss. inaug. de Affusione Frigida tanquam febrium remedio 8vo. Edinb. 1827

Dictionnnaire Encyclopédique des Sciences Médicales; directeur, A. Dechambre:

1re Série, Tom. XVIII—XIX.
2me „ „ X—XI.
3me „ „ III—IV.

Dissertationes Medicæ Inaugurales (160), annuente summo numine ex auctoritate D. Georgii Baird, Academiæ Edinburgenæ præfecti, pro gradu doctoris summisque in medicina honoribus, eruditorum examini subjectæ, 1827
in 6 vols. 8vo. Edinb. 1827 — Mr. T. Taylor.

Entered separately under names of the authors.

DOHRN (R.). Ueber künstliche Frühgeburt bei engem Becken
(Volkmann's Sammlung, No. 94) 8vo. Leipzig, 1875 — Purchased.

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LESSER (L.). Transfusion und Autotransfusion (Volkmann's Sammlung, No. 86) 8vo. Leipzig, 1875 Purchased.

LIDDELL and SCOTT. Greek-English Lexicon, abridged ; sixteenth edition 4to. Oxford, 1874 Ditto.

LIEBMAN (Carlo). Della Medicazione Entro-uterina 8vo. Milano, 1876 Author.

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Medicine—Century of American Medicine, 1776—1876, by E. H. Clarke, H. J. Bigelow, Sam. D. Gross, T. Gaillard Thomas, and J. S. Billings 12mo. Philadelphia, 1876	Dr. Gaillard Thomas.
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——— ——— another copy *plates*, 2 vols. 8vo. Lond. 1876 Purchased.

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RIZZOLI (Francesco). Clinique Chirurgicale; Mémoires de Chirurgie et d'Obstétrique; traduit par R. Andreini *woodcuts*, 8vo. Paris, 1872 — Author.

——— Della Onichia Ulcerosa lurida e della Maligna 4to. Bologna, 1875 — Ditto.

ROBERTON (John). How to use Midwifery Instruments, written in the form of Dialogue 8vo. Manchester — Manchester Med. Soc.

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ROUSSEL (J.). Rapports sur la méthode de Transfusion directe de veine à veine du Sang humain entier et vivant 8vo. Bruxelles, 1876 — Author.

——— La Transfusion, 1re Série; 35 opérations 8vo. Paris, 1876 — Ditto

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TRANSACTIONS.

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Transactions, vol. 9 8vo. Lond. 1876 Society.

MEDICAL AND CHIRURGICAL (Royal) SOCIETY—
Transactions, vol. 59 8vo. Lond. 1876 Ditto.

OBSTETRICAL SOCIETY (Edinburgh)—
Transactions, 1871-4, vol. 3 8vo. Edinb. 1875 Ditto.

Lyon:
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Memoirès et Comptes-Rendus, Tome XV, 1875 Lyon, 1876 Ditto.

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CONGRESS (INTERNATIONAL Medical) OF PHILADELPHIA—
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Philadelphia:
OBSTETRICAL SOCIETY—
Transactions, vol. 3, 1873-4-5
8vo. Philadelphia, 1876 Society.

Washington:
SMITHSONIAN INSTITUTION—
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JOURNALS.

Archives of Dermatology, L. Duncan Bulkley, vol. 2, No. 2, for 1876 8vo. New York Editor.

Canada Medical Journal and Monthly Record of Medical and Surgical Science; edited by Geo. E. Fenwick and Francis W. Campbell
8 vols., 8vo. Montreal, 1865-72 Editor.

——— Canada Medical and Surgical Journal, edited by Geo. E. Fenwick, vol. 1—
8vo. Montreal, 1873— Editor.

Medical Examiner, vol. 1— 8vo. Lond. 1876— Purchased.

Obstetrical Journal of Great Britain and Ireland—
——— American Supplement to, 1875-6 8vo. Ditto.

Journal universel et hebdomadaire de Médecine et de Chirurgie pratiques et des Institutions Médicales, Tomes 1—8 8vo. Paris, 1830 Mr. T. Taylor.

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15. No. 1, stated on label No. 9, Dr. Orme's Short Forceps.
16. No. 2, stated on label No. 10, Dr. Smellie's Short Forceps, not covered with leather as he directs. No. 3, another set, covered with leather.
17. No. 4, stated on label No. 11, Dr. Denman's Short Forceps.
18. No. 5, stated on label No. 15, Dr. Haighton's Short Forceps, the fenestra slightly altered.
19. No. 6, stated on label No. 17, name unknown, but similar to those of Hennig. The fenestrum of one blade is considerably longer than that of the other, through which the short fenestrated blade is passed.
20 & 21. Dr. D. D. Davis's Twisted Forceps, two pairs, to rectify the position of child's head. No. 7, stated on label No. 19, to alter the head from fourth to first position. No. 8, stated on label No. 20, to alter the head from third to first position. (Used to be, and should be, covered with leather.)
22. No. 9, stated on label No. 21, a curious three-bladed instrument, name unknown.

Long Forceps, with double curves, viz. pelvic and cranial.

23. No. 1, stated on label No. 1, Baudelocque's Forceps.

THOMAS RADFORD, M.D. (*continued*)—

24. No. 2, stated on label No. 22, Dr. Haighton's Long Forceps. The handles and shanks were originally covered with leather.
25. No. 3, stated on label No. 4, Dr. D. D. Davis's Long Forceps, consisting of two long blades, flexible at their extremities, which were covered with leather and padded with flannel, and a straight, short fenestrated blade; see Operative Midwifery.
26. No. 4, stated on label No. 5, Dr. Radford's Forceps, his first contrivance in 1825.

Straight Long Forceps, having only the cranial curve.

27. No. 1, stated on label No. 3, Dr. Conquest's Long Forceps, peculiarities having a perineal curve in the shanks and a screw-joint in one blade to facilitate introduction.

Blunt Hooks.

28. No. 1, stated on label No. 35, common Blunt Hook, with good handle.

Instrument to apply Fillet.

29. No. 1, stated on label No. 37, consists of two portions with concave blades, each having two transverse openings.

Decapitating Knives.

30. No. 1, old and of very incompetent construction.
31. No. 2, stated on label No. 58, Dr. F. Ramsbotham's Decapitating Knife, well calculated to answer its purpose.
32. No. 3, stated on label No. 59, Dr. D. D. Davis's Embryotomy Knife.

Craniotomy and Embryotomy Instruments.

Perforators.

33. No. 1, stated on label No. 38, Dr. Denman's Perforator, bad construction.
34. No. 2, stated on label No. 39, Mr. Holmes's Perforator.
35. No. 3, stated on label No. 40, a slight modification of Mr. Holmes's.

Crotchets.

36. No. 1, stated on label No. 46, a very old Crotchet, bad construction.
37. No. 2, stated on label No. 47, a very old Crotchet, with the hook at a different angle.

Craniotomy Forceps and Guarded Crotchets.

38. No. 1, stated on label No. 48, Dr. Smellie's Crotchet Forceps, two blades.
39. No. 2, stated on label No, 55, Dr. Haighton's Craniotomy Forceps, hinge joint.

THOMAS RADFORD, M.D. *(continued)*—

40. No. 3, stated on label No. 53, Dr. Conquest's Craniotomy Forceps; peculiarity, a perineal curve in the shank, it has a hinge joint.
41. No. 4, stated on label No. 52, Mr. Holmes's Craniotomy Forceps, with hinge joint.
42. No. 5, stated on label No. 54, Dr. Radford's Craniotomy Forceps, consists of two blades, with the ordinary Forceps lock.
43. No. 6, stated on label No. 50. Dr. D. D. Davis's Guarded Crotchet, the crotchet portion to be placed outside of head.
44. No. 7, stated on label No. 51. Another variety of Guarded Crotchet, the crotchet portion to be placed inside of head.

Osteotomists.

45. No. 1, stated on label No. 42. Dr. D. D. Davis's Osteotomist, with oval-shaped opening at the extremities, constructed so as to act as a punch to cut out portions of cranial bone.
46. No. 2, stated on label No. 43. Another variety with oblong opening.

Scoop.

47. No. 1, stated on label No. 44, Scoop, an old instrument to break up and dislodge the brain.
48. No. 3, stated on label No. 44. Forceps for detaching and removing portions of cranial bones.

Guarded Body Crotchets.

49. No. 1, stated on label No. 60, Dr. D. D. Davis's Body Crotchet, to be used after decapitation.

To Replace Prolapsed Funis.

50. No. 1, stated on label No. 33, Dr. D. D. Davis's Instrument to carry up the prolapsed funis. It is a flat metallic rod, perforated by holes so that the fallen loops can be fastened.

Ovum Forceps.

51. No. 1, stated on label No. 62, Dr. Radford's Forceps to remove the ovum.

Placental Perforator.

52. No. 1, stated on label No. 34, Dr. Radford's Trocar and Canula for perforating the placenta in cases of placenta prævia, to draw off the liq. amnii.

Vaginal Conductor.

53. No. 1, Dr. Radford's Conductor for applying galvanism per vaginam to the uterus.

THOMAS RADFORD, M.D. (*continued*)—

54. No. 1, stated on label No. 1, Baudelocque's Compas d'Épaisseur.
55. No. 1, stated on label No 2, Dr. Coutouly's Pelvimeter.
56. An instrument constructed for the purpose of abstracting blood, instead of using leeches; it consists of a syringe and a brass box with steel points, and receiving glasses to be connected with the syringe; it is a bad instrument.

Transfusion.

57. Dr. James Blundell's Impellor, which consists of a great number of portions contained in a mahogany box. This instrument was made by Laundy, under the immediate supervision of Dr. Blundell, for Dr. Radford. For its application, &c., see his 'Researches, Physiological and Pathological.' Dr. Revell put a list of all its parts in the box.
58. A Block of Wood, in the centre of which is carved a distorted pelvis, with iron arms to fix it on a stand. There are straps and buckles to fasten the fœtus down. The pelvis carved in this block is from that of Elizabeth Thompson, upon whom the Cæsarian section was performed by Mr. William Wood. The case is related in the 'Medical Memoirs,' vol. v, and is also referred to by Hull in his observation. He gives a plate of the pelvis.

LLOYD ROBERTS, M.D., late Vice-President of the Society.
Large Uterine Inspection Case.
Small " "
Double Lever Ovum Forceps.
Perforator.
(Manufacturer, Wood, of Manchester.)
Cephalotribe (made by Mayer and Meltzer).

T. G. SWAYNE, M.D., late Vice-President of the Society.
Blunt Hook and Sling, for difficult cases of breech presentation.
Various Obstetrical Instruments and Plates.

T. SPENCER WELLS, F.R.C.S., late Vice-President of the Society.
For various instruments of own invention and modification, *see Messrs. Krohne and Co.'s collection.*

G. C. P. MURRAY, M.D., Hon. Treasurer of the Society.
1. A new Flexible Uterine Sound.
2. An Ovarian Trocar and Canula.
3. A Pessary for Anteflexion of Uterus.
4. Uterine Dilators.
Oil Painting of Dr. Marshall Hall.

A. WILTSHIRE, M.D., Hon. Secretary of the Society.
Portrait by Hogarth.
Pictures by Patrick Nasmyth.
General Ahlefeld, by Jens Juel.
Protected Perforator, &c.

ARTHUR W. EDIS, M.D., Hon. Sec. of Society.
Bust of late Campbell de Morgan (through the kindness of the authorities of the Middlesex Hospital); also various Etchings and Watercolour Drawings.

J. H. AVELING, M.D., Hon. Librarian of the Society.
Loop Saw for dividing structures by linear friction.
Coil Clamp Suture for vesico-vaginal fistulæ.
(For Aveling's Transfusion Apparatus for performing the operation by the immediate method, Hysterotome, Rectal Protruder, Double Uterine Sound, Gynæcometer, see Messrs. Krohne and Co.)
For Aveling's Curved Handled Forceps and Polyptrite, see Society's Collection.

Professor ALEXANDER SIMPSON, M.D., Edinburgh.
1. Sir J. Y. Simpson's Forceps.
2. „ Cephalotribe.
3. „ Cranioclast.
4. „ Perforator.
5. „ Spondylotomy Scissors.
6. „ Tube for applying ointments.
7. „ Stem Pessary Case.
8. „ Jointed Intra-uterine Stem Pessary.
9. „ Stem Pessaries (2).
10. „ Ring Pessary (2).
11. „ Shelf Pessary (2).
12. „ Varieties of Hysterotome (4).
13. „ Intra-Uterine Curette (2).
14. „ Varieties of Porte Caustique (2).
15. Dr. Elliot's American Forceps.
16. Scanzoni's Cephalotribe.
17. Kilian's Cephalotribe.
18. Ziegler's Forceps.
19. „ Breaking Forceps.
20. Speculum, after Ambrose Paré.
21. Old Toothed Forceps.
22. Chain and Hook Forceps.

FREDK. WM. CORY, M.D., Buckhurst Hill. (*Collection of rare Instruments.*)
1. Pair of Forceps, by Levret.
2. „ unknown.
3. „ „
4. „ by Smellie.
5. „ „
6. „ „

FREDK. WM. CORY, M.D. (*continued*)—

7. Pair of Forceps, by Lowder.
8. „ by Dr. R. W. Johnson, with second curvature by Mr. Page.
9. „ said to be contemporary with Dr. Chamberlen's.
10. „ by Jacques Mesnard.
11. „ by Dr. Burton.
12. Vectis, unknown.
13. „ by Dr. Dennison.
14. „ by Dr. Lowder.
15. „ by Dr. Bland.
16. „ unknown.
17. „ „
18. „ „
19. Blunt Hooks, by Dr. Wallace Johnson.
20. Blunt Hook and Crotchet, by Dr. Cory.
21. Double Crotchet, by Mesnard.
22. Crotchet, unknown.
23. Double Crotchet, unknown.
24. „ „
25. Craniotomy Forceps, unknown.
26. „ „
27. Ovum Forceps, by Dr. Cory.
28. Unknown.

LOMBE ATTHILL, M.D., President of the Obstetrical Society of Dublin.

The following are selected from the Rotunda Hospital Museum.

Three pairs Forceps, Duse, 1733.
One pair Forceps, Beatty (senior).
One pair Craniotomy Forceps.
One Expanding Perforator (Grégoire).
One Terebra Occulta (Sir F. Ould).
One Fillet.
One Baudelocque Cephalotribe.
One Expanding Perforator and Tractor.
One Funis Repositor.
One Blot's Perforator.
One Thomo Perforator.
One Chamberlen's Forceps.
One Trephine.

CHARLES CLAY, Ext. L.R.C.P., Manchester.

A Portfolio of seven Portraits of eminent Medical Men, with short Biographies attached.
Twenty-four sections of Illustrated Medical Biography (series incomplete at present).
Clay's Spring-coil Uterine Pessary.

CHARLES CLAY, Ext. L.R.C.P. (*continued*)—

Pocket Forceps, either blade can be introduced first; one blade useful as a tractor.

About twenty rare and very scarce editions of that extraordinary, rare, and curious work, the Ancient Medical Poem, 'De Regimine Sanitatis Salernitatis.' Three are still more curious, being manuscripts.

J. B. POTTER, M.D.

Uterine Scarificator, a concealed blade in hollow sound admitting of easy protrusion, obviating the use of a speculum or the application of leeches.

Short Hollow Curved Needle for perineal operations, with trumpet-shaped orifice for the easy passage of double wire.

Modification of Fergusson's Speculum, glass, conical, length 4", with handle (3 sizes), for actual cautery, &c.

Combined Speculum and Retractor, after Sims' Speculum, Blades with sliding trap for examining vaginal walls in operation on vagina.

Hollow Vulcanite Sound, after Simpson's; no divisions, with a projecting elbow, for intra-uterine injections; stem can be altered; uninjured by acid, styptics, &c.

Sunset on the Cornish Coast. (Oil.) Oliver Rhys.

A Soldier's Legacy. (Oil.) Mrs. E. Crawford. Sketch of picture in R A., 1876.

The Harbour Bar. (Watercolour.) Oliver Rhys.

Seine boats on the look-out near the Lizard. (Watercolour.) Oliver Rhys.

A Leisure Half Hour. (Oil.) William Oliver.

THOMAS W. HIME, M.D., Sheffield.

1. Improved Curettes for abrasion of cancer of uterus.
2. Martin's Gynæcological Atlas.
3. Coils, &c., as used in the Sheffield Hospital in operations of the vagina, &c.
4. New Electrode for intra-uterine or intra-vesical use.
5. Small-framed Photograph of Scanzoni and Braun (Vienna).
6. Photographs of Billroth, Virchow, Oppolzer, Langenböck, O. Weber.
7. Engraving of Trousseau.

JOHN WILLIAMS, M.D.

Engraving of Marin, by Masson, 1776-7.

Section of Uterus three days before menstruation.

" " in course of menstruation.

" " towards end of menstruation.

" " three days after cessation of menstruation.

" " about fourteen days after cessation of menstruation.

" " just before menstruation.

(See Messrs. Ross and Co.)

F. Symonds, M.A., F.R.C.S., Oxford, Hon. Loc. Sec.
A few selected specimens of Obstetric Instruments.
A Portfolio of Prints connected with the Medical Profession.

Alfred Walker, M.D., Hertford, Hon. Loc. Sec. of Society.
The Posthumous Portrait of a Physician, by Sir Thomas Lawrence.
Engravings—Dr. Denman, Dr. Baillie, Dr. Jenner with a view of Cows and Milkmaids in the distance, Sir Richard Croft, and John Birch, and one not identified.

Wm. Donald Napier, M.R.C.S.
Vesical Instruments, Pessaries, &c.
New Appliances for Local Anæsthesia.
Portrait by Sir Joshua Reynolds.
Breech-loading Revolver Gun, temp. Charles I.
"Canterbury Pilgrims," the original Water-colour Drawing by E. H. Corbould.
An Ancient Physician.
A Case of Remarkable Curiosities.
Exquisite Clock, temp. Queen Elizabeth (1573), in Chased Metal Work.
Early Picture, by Van Eyck.
Early Repoussè Steel Dish (Italian).
" Brass.
" Silver Entablature.

Snow Beck, M.D., F.R.S.
1. Dissection of the sympathetic nervous system in the abdomen, with the nerves furnished to the uterus, the ovary, the vagina, the vulva, the bladder, and the rectum.
2. Dissection of the nerves distributed to the gravid uterus and the ovary.
3. Dissection showing the so-called utero-cervical ganglion in the gravid uterus, being made up of fibrillar connective tissue surrounding the pelvic plexus of nerves.
4. Dissection of the so-called roots of the sympathetic nervous system, showing that the cerebro-spinal nervous system and the sympathetic nervous system exist separately and independently of each other.
5. Drawing showing a portion of the tissue at the inner surface of the uterus, which formed part of the maternal placenta, in a state of necrosis (slough after parturition), exposing the open orifices of the uterine sinuses, followed by puerperal septicæmia and death at the end of seven weeks.
6. Drawing showing the removal (a few weeks after parturition) of the principal part of the tissue at the inner surface of the uterus where the placenta had been seated, the exposure of the open orifices of the uterine sinuses, followed by septicæmia and death.

SNOW BECK, M.D., F.R.S. (*continued*).

7. Drawing showing the uterine sinuses gorged with black grumous fluid containing an abundance of iron, after the injection of the uterus with a solution of the perchloride of iron to arrest secondary hæmorrhage after parturition. A view of the inner surface of the uterus.

8. Drawing showing the posterior surface of the same uterus with the uterine sinuses gorged with the same black grumous fluid.

9. Drawing, enlarged, of a section of the walls of the unimpregnated uterus, showing the interlacing of the fasciculæ of the contractile tissue, and forming a continuous substance with the soft tissue at the inner surface, usually called mucous membrane.

10. Drawing showing the formation and structure of the papillomatous growth in the Royal College of Physicians, and described by Sir Charles M. Clarke as cauliflower excrescence of the os uteri.

11. Soft shaggy tissue filling the cavity of the uterus and the upper part of the vagina, formed by fatty degeneration of the contractile tissue of the uterus.

12. A portion of the same soft shaggy tissue of the uterus adhering to the peritoneal surface of the small intestine.

13. Microscopical appearances of the same contractile tissue of the uterus in the different stages of fatty degeneration.

LAWSON TAIT, F.R.C.S.

Ovariotomy Trocars.
Placenta Scoop.
Intra-uterine Refrigerator, for metrorrhagia.
An Æther Inhaler.
Photograph of the House in which Cheselden was born.

JOHN GORHAM, M.R.C.S., of Tunbridge.

A Photograph, from an Oil Painting by Macnee, of "William James West," whose successful case of Ovariotomy at Tunbridge in 1839 brought the operation prominently before the Surgeons of Guy's Hospital, to whom he had sent the Cyst, and was the immediate cause of Mr. Morgan performing that operation in the same year. *The first case done in a London hospital.*

T. DARBY, M.R.C.S., Vice-Pres. Irish Med. Assoc.

Long Forceps for Ligaturing Tumour high up in utero.
Boxwood Pessaries, with perineal plate, for extreme cases of prolapse from rupture of perinæum extending into rectum.

HEYWOOD SMITH, M.A., M.D.

Angular Scissors, straight and curved, for operation on the uterus, throat, &c.

Improved Ecraseur for allowing Wire to be freed after its application.

Rat-trap Forceps for removal of large tumours from Vagina.

Cord Crusher for division of the Funis.

PROTHEROE SMITH, M.D.

Double Tapering Cylindrical Speculum.
Uterine Dilator and Sound.
Chloroform Inhaler.
Double-bladed Hysterotome.
Aspirator as Exploring Needle Trocar.
Pelvic Band for spinal and pelvic deformities.
Parallel Uterine Sound.
Expanding Cylindrical Speculum.
Sliding Hysterotome.
Elastic Pessary, Retractors.
Uterine Porte Caustic, Uterine Irrigator.
Serrated Scissors, Obstetric Bandage.
Trocar and Canula, The Gynæcological Vade Mecum.
Pneumatic Plug for Speculum.

See Messrs. Mayer and Meltzer.

WM. M. A. BYRNE, M.D., Dublin.

A large Vesical Calculus expelled in the seventh month of pregnancy by natural efforts; also a Cyst expelled previous to birth of child.

WM. GOODELL, M.D., Philadelphia.

Goodell's Uterine Speculum and an Aluminium Intra-uterine Applicator.

JOHN S. BARTRUM, F.R.C.S., Bath, Hon. Loc. Sec.

Two interesting ancient Forceps, one the property of the late Clement Barter, M.B., of Bath, and the other of the Bath United Hospital. History unknown.

A. L. GALABIN, M.A., M.D.

A new kind of Anteflexion Pessary.

WILLIAM BATHURST WOODMAN, M.D.

Ancient Leather-covered Forceps, one hundred years old.
Several Photographs and curious French Prints.

JAMES BRAITHWAITE, M.D., Leeds.

Braithwaite's Forceps, both blades can be introduced at once and separated afterwards.

A. E. AUST LAWRENCE, M.D., Clifton.

Some valuable old Obstetric Works.

ARTHUR C. COLE and Son, Liverpool.

A number of beautiful Physiological and Pathological Microscopical Specimens, stained and injected.

Isaac Harrinson, F.R.C.S., Reading, Hon. Loc. Secretary.
By kind permission of Mr. Barford, M.R.C.S., a Portrait of Dr. Garth, Founder of the Apothecaries' Company, in the time of Queen Anne.

J. Ashburton Thompson, L.R.C.P. Lond.
Leaves and Fruit of Erythroxylon Coca.

John Charles Langmore, M.B.
A Miniature Portrait of Sydenham, and a fine Engraving of William Hunter.

Percy Boulton, M.D.
Expanding Stem Pessary, for use after incision of cervix, &c.
Boulton's Modification of Greenhalgh's Soft India-rubber Stem Pessary, to prevent fouling.

Sir Wm. Fergusson, Bart., F.R.S.
Several Portraits of Medical Men; amongst others, of J. Abernethy and Sir James Simpson, Bart.

Thos. Bryant, F.R.C.S.
A rare Medallion of John Hunter.
A Portfolio of Bartolozzi's prints and etchings.
The works of the Caracci.

G. Prescott Hewett, Esq., F.R.C.S., F.R.S.
Some Watercolour Paintings.

F. Seymour Haden, F.R.C.S.
Two rare and beautiful Etchings by Rembrandt, also one by himself.

William Hunter, M.D., Rothsay.
A Mask of William Hunter, taken shortly after death.
The Armorial Bearings of William Hunter, obtained by himself from the College of Heraldry.

Thos. Hyde Hills, Esq.
Dog and Rabbit, an Old Hunter (an early picture), a Sketch of man's head—all by Sir Edwin Landseer.

S. Cartwright, F.R.C.S.
Rare Engraving of the "Barber Surgeons, 1670, presenting a Petition to Henry VIII."
Proof Engraving of John Hunter, by Sharp.

C. S. Watkins, M.R.C.S.
Engravings of Sir Henry Halford, Abernethy, and Lister, by Turner, from paintings by Sir Thomas Lawrence.

W. H. Allchin, M.D.
Specimens of Submarine Telegraph Cable and a portion of first Atlantic Cable after twenty years' submersion.

A. J. Miles, M.D., Cincinnati.
A Bivalve Speculum.

W. Martindale, M.P.S., London.
Specimens of substances yielding Caffeine, Theine, Theobromine, Cocaine, and Guaranine, viz. Kola Nut Seeds, Coca, Cocoa, Maté (Paraguay Tea), Guarana, Tea, Coffee.
Vaseline (Gelatum Petroleum).
„ medicated with Thymol, Oil of Cloves, Oxychloride of Bismuth, Carbolic Acid, &c., in portable vulcanite jars for the use of surgeons and obstetricians.
Glycerole of Subacetate of Lead.
„ „ with Morphia.
Jaborandi, leaves and tincture, also the alkaloid as Nitrate of Pilocarpine.
Gelsemium, root and tincture.
Araroba, or Goa, Powder.
Liquor Ergotæ Ammon.

Clement Godson, M.D.
Lagetta Lintearia Bark, and D'Oyleys made of it, and various Instruments (see Messrs. Arnold & Co.).

John Bassett, M.D.
Four beautifully coloured Diagrams, showing extreme disease of the Placenta leading to Death of Fœtus in each case.

E. J. Prœger, M.R.C.S.
Portraits of J. A. Symonds, M.D., Charles Fox, M.D., Herepath the Toxicologist, and Spurzheim.

J. E. Adlard, Esq.
Portrait (oil), by Constantine Necher.
Fish Market, Rome (watercolour), by Prout.

Archibald Billing, M.D., F.R.S.
Choice collection of Gems.

Wm. Bowman, F.R.C.S., F.R.S.
Some beautiful Paintings by Carl Haag.

Philip C. Hardwick, Esq.
Antique Ivories.

Joseph S. Earle, Esq.
Collection of Rare Coins.

Stewart Westmacott, Esq.
Pictures of Eastwell Park, Eastwell Church, The Falls of Foyers, Saltwood, near Hythe, Kent.

James Westmacott, Esq.
Statuary.

Alfred Newton, Esq.
Watercolour Drawings.

EDWARD DAVIS, Esq. (by favour of S. Carter, Esq.)
Bust of Sir Francis Ronalds (Electrician) and other objects.

W. SHARP, Esq.
Oil Paintings by Lundens and Breudrel.

Messrs. GRAVES.
Valuable Prints.

JAMES ALLANSON BULL, Esq.
Equipped for the Wedding. (Watercolour.)

Messrs. BARRAUD and JERRARD.
Unfinished Proof of Messrs. Barraud and Jerrard's Picture, "Leaders in Medicine and Surgery, 1876," containing over 100 portraits of leading physicians and surgeons.

THOMAS CHAMBERS, F.R.C.P. Edin.
Head of Charles the Second, by Sir Peter Lely.
Chronic Hydrocephalic Head of a Child æt. 10 Months. Life size.
Ovarian Actual-Cautery Parallel Clamp.
Speculum Vulsellum Forceps.
Vulcanite Intra-uterine Stem.
Rectum Dilator.

BALMANNO SQUIRE, M.B.
Vulcanized India-rubber Garments for skin affections in children.

MARO TUCHMANN, M.D.
An Extractor for vesical calculi.

THE ROYAL COLLEGE OF PHYSICIANS, LONDON.
A Case of Surgical and other Instruments, presented to the College by Sir Francis Prujean, 1653, found amongst other ancient records on their removal from Warwick Street, City, 1824, to their present building; and many other valuable objects.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY,
The following most valuable and important collection of Dr. Peter Chamberlen's Obstetric Instruments are lent. They were discovered in a secret depository at his residence, Woodham Mortimer Hall, Essex, and presented to the Royal Medical and Chirurgical Society by Mr. Carwardine. They consist of 1, 2, 3, Levers; 4, 5, 6, Crotchets; 7, 8, 9, 10, Forceps; and 11, 12, 13, Fillets.

THE MEDICAL SOCIETY OF LONDON.
Portraits of Drs. Lettsom, Fothergill, and Clutterbuck, also large Picture of Original Fellows.

UNIVERSITY COLLEGE, LONDON.
Busts of the late Dr. Parkes, F.R.S., and the late Mr. Liston.

OBSTETRICAL SOCIETY OF LONDON.

Baudelocque's Original Cephalotribe.

Cephalotribes, Assalini, Depaul, Matthews Duncan, Hennig, Kidd, Lazarewitch (two varieties), Ed. Martin, Rizzoli.

Blunt Hooks, Prof. Lazarewitch (two kinds), J. Radford.

Craniotome, F. Rizzoli.

„ Tire-tête, F. Rizzoli.

Craniotomy Forceps, R. Barnes, F. Churchill, J. Hall Davis, Sir J. Simpson.

Crotchet, T. Radford.

Dilators, Ancient.

„ Urethral, Sir J. Simpson.

„ Uterine, S. W. Hembrough, W. O. Priestley.

Ecraseurs, J. Braxton Hicks, Lazarewitch.

Embryotomes, Lazarewitch, F. Rizzoli.

Forceps, Ancient, Assalini, Aveling, Bentley, Chassagny, Churchill, Denman, Gayton, Greenhalgh, Hennig, Graily Hewitt, Lazarewitch, Levy, Lovati, Murphy, Pajot, Radford, Rizzoli.

Lever, Boddaert.

Metrotomes, Greenhalgh, Lazarewitch.

Ovariotomy Clamp, T. Spencer Wells.

„ Trocar Syphon, T. Spencer Wells.

„ „ Tubular „

„ „ Spring „

Pelvimeters, Lazarewitch, Lazzati, Rizzoli.

Perforators, Assalini, C. Braun, Matthews, Rizzoli, Smellie, Sir J. Simpson.

Pleximeter, Lazarewitch.

Polyptrite, J. H. Aveling.

Polypus Snare and Forceps, Graefe, Maw.

Premature Labour Instruments, Dubois, Lazarewitch.

Specula, Antique, Trivalve, Rizzoli, Sir J. Simpson.

Tire-têtes, Lollini, Rizzoli.

Vectis, Prof. Fabbri.

Transfusion Instruments, Belaria Casella, Laundy.

Several casts of the uterus at various stages of involution; also of two of ruptured uteri, presented to the Society by Arthur Farre, M.D., F.R.S.

Portrait Bust of the first Dr. Rigby.

Portraits of Honorary Fellows, and the Album and Portraits of Fellows.

MESSRS. MAW & SONS.

A Collection of every kind of known Pessary.

A large variety of Obstetric Instruments.

MESSRS. MAYER and MELTZER.

Various Gynæcological Instruments.

Messrs. COXETER & SONS.
A variety of Instruments and Appliances for Obstetric Practice.

Messrs. KROHNE & SESEMANN.
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